# What is Matter and what is Force?



## Contents and key concepts

#### **Is Electricity Matter or Force?**

By a Theosophist.	3
What is Matter and what is Force?	
Reply by another Theosophist.	6
Appendices	
1. Svabhava is the occult term for Kama-Eros.	
2. Quick overview of the key concepts.	
3. Kosmos and Cosmos compared and contrasted.	
Suggested reading for students.	
From our Secret Doctrine's First Proposition Series.	21
On Atomon or Atmeton, the Greek words for Indivisible.	23



# **Is Electricity Matter or Force?**

#### By a Theosophist.1

First published in *The Theosophist*, Vol. III, No. 12, September 1882, pp. 318-19. Republished in *Blavatsky Collected Writings*, (IS ELECTRICITY MATTER OR FORCE?) IV pp. 205-8.

N A VERY INTERESTING and able address on "The Common Foundation of all Religions," delivered at Madras, on April 26th, 1882, by Colonel H.S. Olcott, President-Founder of the Theosophical Society, the learned President, while speaking of matter, has asserted that electricity is matter, like the air and water.

I will quote his own words here:

Well then, to return, is it matter, or something else? I say matter *plus* something else. And here stop a moment to think what matter is. Loose thinkers — among whom we must class raw lads fresh from College, though they be ever so much titled — are apt to associate the idea of matter with the properties of density, visibility, and tangibility. But this is very inexcusable. The air we breathe is invisible, yet matter — its equivalents of oxygen, hydrogen (?), nitrogen, and carbonic acid, are each atomic, ponderable and demonstrable by analysis. *Electricity* cannot, except under prepared conditions, be seen, yet it is *matter*. The universal ether of science no one ever saw, yet it is matter in a state of extreme tenuity. Take the familiar example of forms of water, and see how they rapidly run up the scale of tenuity until they elude the clutch of science: stone-hard ice, melted ice, condensed steam, superheated and invisible steam, *electricity* (?) and — it is gone out of the world of effects into the world of causes!

The familiar examples of air, water, and the universal ether given by the learned Colonel to illustrate matter, are well known and cannot be disputed for a moment, but how he reconciles the idea of electricity, being also an example of matter, cannot be conceived. Taking his own definition of matter, "atomic, ponderable, and demonstrable," I cannot understand how his material electricity will stand these tests. I will explain this further on when showing the difference between force and matter.

According to the latest theories, electricity is regarded as a force, and not matter. The best thinkers and best writers on physical science, as taught in Europe, are agreed on this point. Professor Tyndall, one of the best materialistic philosophers of the present century, while writing on "Matter and Force," says:

Long-thinking and experimenting has led philosophers to conclude that matter is composed of atoms, from which whether separate or in combination, the whole material world is built up. The air we breathe, for example, is mainly a mechanical mixture of the atoms of oxygen and nitrogen. The water we drink is

\_

<sup>&</sup>lt;sup>1</sup> [This article is reprinted here, as it is directly related to the one which follows. — Boris de Zirkoff.]

#### SECRET DOCTRINE'S FIRST PROPOSITION SERIES IS ELECTRICITY MATTER OR FORCE?

also composed of oxygen and hydrogen. But it differs from the air in this particular, that in water the oxygen and hydrogen are not mechanically mixed, but chemically combined. The atoms of oxygen and those of hydrogen exert enormous attraction over each other; so that, when brought into sufficient proximity, they rush together with an almost incredible force to form a chemical compound. But powerful as is the force with which these atoms lock themselves together, we have the means of tearing them asunder, and the agent by which we accomplish this may here receive a few moments' attention.

Then he goes on describing the development of this force which he calls electricity. Here Professor Tyndall clearly shows that *matter* is different from *force*.

Again, in the chapter on Scientific Materialism, Professor Tyndall says:

The forms of the minerals resulting from this play of polar forces are various, and exhibit different degrees of complexity. Men of science avail themselves of all means of exploring their molecular structure. For this purpose they employ in turn as agents of exploration, light, heat, magnetism, electricity, and sound.

According to the latest researches of modern physical science, philosophers have recognized the existence of some agency, which they either call a force or energy, and they regard the several physical forces, viz., light, sound, heat, magnetism, and electricity as but different manifestations of the same.

Professor Balfour Stewart regards *electricity* as a manifestation of energy.

Professor Ganot defines electricity as a physical agent.

Professor Miller calls it a *compound force*.

Force, energy, and physical agent are simply different words to express the same idea. It will thus be seen that the modern men of science are agreed upon this point, that electricity is a force. Let us proceed a step farther, and see whether matter and force are interchangeable terms. That is whether matter is force, or force is matter.

From the quotations given above, it will be seen that Professor Tyndall says that matter is composed of atoms, and that which keeps these atoms together or tears them asunder is force. That is, matter is different from force. As matter is composed of atoms it must be ponderable; Colonel Olcott admits this. It can be proved by experiment that the air we breathe, and the water we drink, have each of them some weight. The universal ether of science, which exists in extreme tenuity, can be proved to possess some weight.

Is this test applicable to force? In whatever form it may be manifest, as light, sound, heat, magnetism, or electricity, it can be experimentally proved that it has no weight.

Light, according to the latest theories in science, is the result of undulations or vibrations of an elastic medium or ether of inconceivable tenuity, filling all space. By any scientific apparatus, yet known, it is not practicable to weigh a ray of light. If we pass several rays of light through a lens or prism, it does not in any way gain in weight.

Science would feel thankful to our correspondent, we should say, if he could but prove his assertion. [H.P. Blavatsky]

## SECRET DOCTRINE'S FIRST PROPOSITION SERIES IS ELECTRICITY MATTER OR FORCE?

Heat is the vibration of the atom of a body. Can we weigh heat? I don't think we can. The ball experiment is well known even to the beginners of science.

Magnetism or electricity are called polar forces.

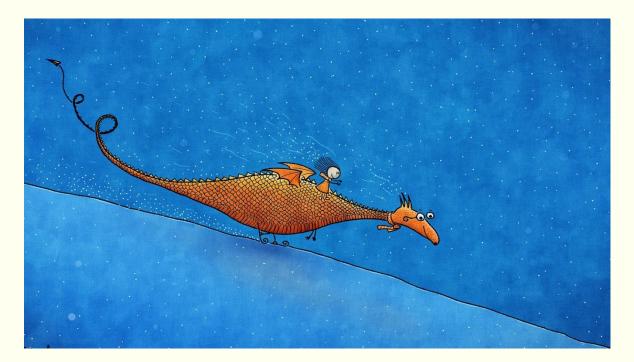
A soft iron bar, after it is permanently magnetized, does not gain in weight. So, also, a Leyden jar charged with electricity does not gain in weight; or a platinum wire attached to the two poles of a galvanic battery which will be red hot while electricity is passing through it, will not gain in weight. It may be urged by some that the present science has not the means to weigh these. The simple reply to this would be that if the chemical balance is now capable of weighing minute bodies, there is no reason why these agents, which are both demonstrable and appreciable, should not be weighed by it, if they had any weight.

It would seem that such an argument may be brought forward simply with a view to evading the point in question.

Hence we may conclude that these several manifestations of force are imponderable. As matter is ponderable, they cannot be matter: that is, force is not matter. *Electricity* has been described above as a force; therefore, it is not matter. How is it then that electricity is called matter, and is mentioned as an illustration of matter along with air and water?

As a question of science, discussion on this subject seems desirable, and *The Theosophist* would assist the cause of science by giving publicity to this letter, and inviting replies to it from those including Colonel Olcott, who maintain that electricity is *matter* and not a *force*.

Baroda, July 19th, 1882



<sup>&</sup>lt;sup>1</sup> "Soft iron *cannot* be "permanently" magnetised. Our correspondent confounds it probably with steel. [H.P. Blavatsky]

What is Matter and what is Force v. 15.23, www.philaletheians.co.uk, 13 August 2023

## What is Matter and what is Force?

#### Reply by another Theosophist.1

First published in *The Theosophist*, Vol. III, No. 12, September 1882, pp. 319-24. Republished in *Blavatsky Collected Writings*, (WHAT IS MATTER AND WHAT IS FORCE?) IV pp. 208-26.

"As a question of science," — which, as such, has to be strictly kept within the boundaries of modern materialistic science — all "discussion on this subject," however "desirable," would prove, on the whole, unprofitable. Firstly, because science confines herself only to the physical aspects of the conservation of energy or correlation of forces; and, secondly, because, notwithstanding her own frank admissions of helpless ignorance of the ultimate causes of things, judging by the tone of our critic's article, I doubt whether he would be willing to admit the utter inaptness of some of the scientific terms as approved by the Dvija, the "twice-born" of the Royal Society, and obediently accepted by their easily persuaded admirers. In our age of freedom of thought and cheap paradox, party spirit reigns supreme, and science has become more intolerant, if possible, than even theology. The only position, therefore, that could be safely assumed by a student of esoteric philosophy against (evidently) a champion of the exact science, in a discussion upon the appropriateness of certain modern scientific terms, would be to fight the latter with his own weapons, yet without stirring an inch from one's own ground. And this is just what I now propose to do.

At the first glance, there does not seem much to answer in the article — "Is Electricity Matter or Force?" A modest point of interrogation, parenthetically placed after the word "hydrogen," in an enumeration of the equivalents of "the air we breathe"; and, the question, as shown in the heading, and already seemingly settled by a series of quotations taken from scientific authorities who have been pleased to regard electricity as "a force," — is all we find in it. But it is so only at the "first glance." One need not study our querist's article very profoundly, to perceive that it involves a question of a far more serious moment to the Theosophists, than there appears to be in it at first. It is neither more nor less than the following: "Is the President of a Society, which numbers among its adherents some of the most scientific minds and intellects of Europe and America, any better than an ignoramus who has not even studied, or, has forgotten, his school primers — or is he not?" The implication is a very grave one, and demands as serious a consideration.

Now, it could hardly be expected that any reasonable man personally acquainted with the President would lose his time over proving that Colonel Olcott cannot be ignorant of that which every schoolboy is taught and knows; to wit, that air, the gase-

<sup>&</sup>lt;sup>1</sup> [In the Letters of H.P. Blavatsky to A.P. Sinnett, p. 8, H.P. Blavatsky states that this answer is from the pen of Master K.H. It is not known whether it was dictated to her, or received in some other manner. — Boris de Zirkoff.]

ous fluid, in which we live and breathe, consists essentially of two gases: oxygen and nitrogen, in a state of mechanical mixture. Nor does anyone need a Professor Tyndall to assure him of the fact. Hence, while the sneer implied in the interrogation mark would seem quite natural if the paper emanated from an enemy, it naturally shocks a Theosophist to find it proceeding from a Brother member. No Fellow can be ignorant of the fact, that "the President-Founder of the Theosophical Society" has never pretended to lecture upon any specific subject pertaining to physical sciences which is the province of physicists and chemists; nor has "the learned President" pledged himself never to depart from the orthodox terminology of the Fellows of the Royal Society. An expounder and advocate of occult sciences, he may be permitted to use the peculiar phraseology of the ancient philosophers. It is simply absurd to have to point out that which is self-evident; namely, that the equivalents "of the air we breathe," enumerated by the lecturer, did not relate to the atmospheric air pure and simple — for he would have probably said in such a case "chemical constituents," or its "compound elements" — but to the whole atmosphere, one of the five primitive elements of occult philosophy composed of various and many gases.

To show the better the right we have to assume an attitude of opposition against certain arbitrary assumptions of modern science, and to hold to our own views, I must be permitted to make a short digression and to remind our critic of a few unanswerable points. The bare fact that modern science has been pleased to divide and subdivide the atmosphere into a whole host of elements, and to call them so for her own convenience, is no authoritative reason why the Occultists should accept that terminology. Science has never yet succeeded in decomposing a single one of the many simple bodies, miscalled "elementary substances," for which failure, probably, the latter have been named by her "elementary." And whether she may yet, or never may, succeed in that direction in time, and thus recognize her error, in the meanwhile we, Occultists, permit ourselves to maintain that the alleged "primordial" atoms would be better specified under any other name but that one. With all the respect due to the men of science, the terms "element" and "elementary" applied to the ultimate atoms and molecules of matter of which they know nothing, do not seem in the least justifiable. It is as though the Royal Society agreed to call every star a "Kosmos," because each star is supposed to be a world like our own planet, and then would begin taunting the ancients with ignorance since they knew but of one Kosmos<sup>1</sup> — the boundless infinite universe! So far, however, science admits herself that the words "element" and "elementary," unless applied to primordial principles, or self-existing essences out of which the universe was evoluted, are unfortunate terms; and remarks thereupon that "experimental science deals only with legitimate deductions from the facts of observation, and has nothing to do with any kind of essences except those which it can see, smell, or taste." Professor J.P. Cooke tells us that "Science leaves all others to the metaphysicians." This stern pronunciamento, which shows the men of science refusing to take anything on faith, is immediately followed by a very curious admission made by the same author. "Our theory, I grant,

 $<sup>^{</sup>f 1}$  [See "Kosmos and Cosmos" in our Confusing Words Series. Table presented herein on page 20. — ED. PHIL.]

<sup>&</sup>lt;sup>2</sup> New Chemistry, 1877

<sup>[</sup>an authoritarian announcement]

may all be wrong," he adds, "and there may be no such things as molecules (!) . . . The new chemistry assumes, as its fundamental postulate that the magnitudes we call molecules are realities; but this is the only postulate." We are thus made to suspect that the exact science of chemistry needs to take as well as transcendental metaphysics something on blind faith. Grant her the postulate — and her deductions make of her an exact science; deny it — and the "exact science" falls to pieces! Thus, in this respect, physical science does not stand higher than psychological science, and the Occultists need fear but very little of the thunderbolts of their most exact rivals. Both are, to say the least, on a par. The chemist, though carrying his subdivision of molecules further than the physicist, can no more than he experiment on individual molecules. One may even remind both that none of them has ever seen an individual molecule. Nevertheless, and while priding themselves upon taking nothing on faith, they admit that they cannot often follow the subdivision of molecules with the eye, but "can discern it with the intellect." What more, then, do they do than the Occultists, the alchemists, the adepts? While they discern with the "intellect," the adept, as he maintains, can as easily discern the subdivisibility ad infinitum of that, which his rival of the exact methods pleases to call an "elementary body," and he follows it — with the *spiritual* in addition to his *physical* intellect.

In view then of all that precedes, I maintain that the President of the Theosophical Society had a perfect right to use the language of the Occultists in preference to that of modern science. However, even were we to admit that the "equivalents" under review referred simply to the air we breathe, as specified by that science, I still fail to perceive why the lecturer should not have mentioned "hydrogen" along with the other gases. Though air consists properly but of two gases, yet with these are always present a certain proportion of carbonic acid gas and aqueous vapour. And with the presence of the latter, how can "hydrogen" be excluded? Is our learned Brother prepared to maintain that we never breathe anything but oxygen and nitrogen? The kind assurance we have from science that the presence of any gas in the atmosphere, besides oxygen and nitrogen, ought to be regarded simply as accidental impurities; and that the proportions of the two elements of the air hardly vary, whether taken from thickly populated cities or overcrowded hospitals, is one of those scientific fictions which is hardly borne out by facts. In every closely confined place, in every locality exposed to putrescent exhalations, in crowded suburbs and hospitals — as our critic ought to know — the proportion of oxygen diminishes to make room for mephitic gases.3

But we must pass to the more important question, now, and see, how far science is justified in regarding electricity as a force, and Colonel Olcott — with all the other Eastern Occultists — in maintaining that it is "still matter." Before we open the discussion, I must be allowed to remark, that since "a Theosophist" wants to be scientifically accurate, he ought to remember that science does not call electricity a force,

 $<sup>^{1}</sup>$  [Italics are H.P. Blavatsky's. The quotation is on p. 75 of Cooke's work. — Boris de Zirkoff.]

<sup>&</sup>lt;sup>2</sup> [p. 89]

In Paris — the centre of civilization — the air collected in one of its suburbs, was found, when analysed, a few years ago, to contain only 13.79 per cent [of oxygen] instead of 23, its usual proportion; nitrogen was present to the amount of 81.24 per cent, carbonic acid 2.01, and sulphureted hydrogen 2.99 per cent.

but only one of the many manifestations of the same; a mode of action or motion. Her list of the various kinds of energy which occur in nature is long, and many are the names she uses to distinguish them. With all that, one of her most eminent adepts, Professor Balfour Stewart — one of the authorities he quotes against our President — warns his readers¹ that their enumeration has nothing absolute, or complete about it, "representing, as it does, not so much the present state of our knowledge as of our want of knowledge, or rather profound ignorance of the ultimate constitution of matter." So great is that ignorance, indeed, that treating upon heat, a mode of motion far less mysterious and better understood than electricity, that scientist confesses that "if heat be not a species of motion, it must necessarily be a species of matter," and adds that the men of science "have preferred to consider heat as a species of motion to the alternative of supposing the creation of a peculiar kind of matter."

And if so, what is there to warrant us that science will not yet find out her mistake someday, and recognize and call electricity in agreement with the Occultists "a species of a peculiar kind of matter"?

Thus, before the too dogmatic admirers of modern science take the Occultists to task for viewing electricity under one of its aspects — and for maintaining that its basic principle — MATTER, they ought at first to demonstrate that science errs when she herself, through the mouthpiece of her recognized high priests, confesses her ignorance as to what is properly Force and what is Matter. For instance, the same Professor of Natural Philosophy, Mr. Balfour Stewart, LL.D., F.R.S., in his lectures on *The Conservation of Energy*, tells us as follows:

 $\dots$  we know nothing, or next to nothing, of the ultimate structure and properties of matter, whether organic or inorganic, [and]  $\dots$  it is in truth, only a convenient classification, and nothing more.

Furthermore, one and all, the men of science admit that, though they possess a definite knowledge of the general laws, yet they "have no knowledge of individuals in the domains of physical science." For example, they *suspect* "a large number of our diseases to be caused by organic germs," but they have to avow that their "ignorance about these germs is most complete." And in the chapter "What is Energy?" the same great naturalist staggers the too confiding profane by the following admission:

. . . if our knowledge of the nature and habits of organized molecules be so small, our knowledge of the ultimate molecules of inorganic matter is, if possible, still smaller. . . . It thus appears, that we know little or nothing about the shape or size of molecules, or about the forces which actuate them . . . the very largest masses of the universe share with the very smallest this property of being beyond the scrutiny of the human senses. . . . <sup>3</sup>

See "The Forces and Energies of Nature." [3<sup>rd</sup> chapter of *The Conservation of Energy*, 1874. — *Boris de Zirkoff*.]

<sup>&</sup>lt;sup>2</sup> [pp. 2, 78]

<sup>&</sup>lt;sup>3</sup> [pp. 5-6]

Of *physical* "human senses" he must mean, since he knows little, if anything, of any other senses. But let us take note of some further admissions; this time by Professor Le Conte in his lecture on the *Correlation of Vital with Chemical and Physical Forces*:

 $\dots$  Since the distinction between force and energy is imperfectly or not at all defined in the higher forms of force, and especially in the domain of life  $\dots$  our language cannot be more precise until our ideas in this department are far clearer than now.

Even as regards the familiar liquid — water — science is at a loss to decide whether the oxygen and hydrogen exist, as such, in water, or whether they are produced by some unknown and unconceived transformation of its substances. "It is a question," says Mr. J.P. Cooke, Professor of Chemistry, "about which we may speculate, but in regard to which we have no knowledge. Between the qualities of water and the qualities of these gases there is not the most distant resemblance." All they know is that water can be decomposed by an electrical current; but why it is so decomposed, and then again recombined, or what is the nature of that they call electricity, etc., they do not know. Hydrogen, moreover, was till very lately one of the very few substances, which was known only in its aeriform condition. It is the lightest form of matter known. For nearly sixty years, ever since the days when Davy liquefied chlorine, and Thilorier carbonic acid under a pressure of fifty atmospheres — five gases had always resisted manipulation - hydrogen, oxygen, nitrogen, carbonic oxide, and finally bioxide<sup>3</sup> of nitrogen. Theoretically they might be reduced, but no means could be found by which they could be dealt with practically, although Berthelot had subjected them to a pressure of 800 atmospheres. There, however, where Faraday and Dumas, Regnault and Berthelot had failed, Mr. Cailletet, a comparatively unknown student of science, but a few years ago achieved a complete success. On December 16th, 1878, he liquefied oxygen in the laboratory of the École Normale, and on the 30th of the same month he succeeded in reducing even the refractory hydrogen. Mr. Raoul Pictet, of Geneva, went still further. Oxygen and hydrogen were not only liquefied, but solidified, as the experiment — by illuminating with electric light the jet as it passed from the tubes containing the two gases, and finding therein incontestable signs of polarization which implies the suspension of solid particles in the gas — proved.<sup>4</sup>

There is not an atom in nature, but contains latent or potential electricity which manifests under known conditions. Science knows that matter generates what it calls force, the latter manifesting itself under various forms of energy — such as heat, light, electricity, magnetism, gravitation, etc. — yet that same science has hitherto been unable, as we find from her own admissions as given above, to determine with any certainty where matter ends and force (or spirit, as some call it) begins. Science, while rejecting metaphysics and relegating it through her mouthpiece, Professor Tyndall, to the domain of poetry and fiction, unbridles as often as any metaphy-

<sup>4</sup> Article of Henry de Parville, one of the best of the French popularisers of science. — *Journal des Débats* 

<sup>&</sup>lt;sup>1</sup> See Balfour Stewart, *The Conservation of Energy*, N.Y., 1874, Appendix, *pp.* 172-73.

A cubic yard of air at the temperature of 77 deg. Fahr. weighs about two pounds, while a cubic yard of hydrogen weighs only  $2\frac{1}{2}$  ounces.

<sup>&</sup>lt;sup>3</sup> [Or dioxide: prefix bi- is of Latin origin; di-, of Greek.]

<sup>[</sup>Of dioxide, prefix bi- is of Latiff origin, di-, of Greek.]

sician her wild fancy, and allows mere hypotheses to run races on the field of unproved speculation. All this she does, as in the case of the molecular theory, with no better authority for it, than the paradoxical necessity for the philosophy of every science to arbitrarily select and assume imaginary fundamental principles; the only proof offered in the way of demonstrating the actual existence of the latter being a certain harmony of these principles with observed facts. Thus, when men of science imagine themselves subdividing a grain of sand to the ultimate molecule they call oxide of silicon, they have no real, but only an imaginary and purely hypothetical right to suppose that, if they went on dividing it further (which, of course, they cannot) the molecule, separating itself into its chemical constituents of silicon and oxygen, would finally yield that which has to be regarded as two elementary bodies since the authorities, so regard them! Neither an atom of silicon, nor an atom of oxygen, is capable of any further subdivision into something else — they say. But the only good reason we can find for such a strange belief is, because they have tried the experiment and — failed. But how can they tell that a new discovery, some new invention of still finer and more perfect apparatuses and instruments may not show their error some day? How do they know that those very bodies now called "elementary atoms" are not in their turn compound bodies or molecules, which, when analysed with still greater minuteness, may show containing in themselves the real, primordial, elementary globules, the gross encasement of the still finer atom-spark the spark of LIFE, the source of Electricity — MATTER still! Truly has Henry Khunrath, the greatest of the alchemists and Rosicrucians of the middle ages, shown spirit in man — as in every atom — as a bright flame enclosed within a more or less transparent globule, which he calls soul. And since the men of science confessedly know nothing of

- 1 The origin of either matter or force;
- 2 Nor of electricity or life; and
- **3** Their knowledge of the ultimate molecules of inorganic matter amounts to a cipher;

— why, I ask, should any student of Occultism, whose great masters *may* know, perchance, of essences which the professors of modern materialistic school can neither "see, smell, nor taste," why should he be expected to take their definitions as to what is MATTER and what FORCE as the last word of unerring, infallible science?

"Men of science," our critic tells us, "employ in turn as agents of exploration, light, heat, magnetism, electricity and sound"; and at the same time he enunciates the now heretical proposition, "that these several manifestations of force are *imponderable*." I respectfully suggest that when he speaks of *imponderable* agents he sins against the decrees of his great masters. Let him study the books published upon the newly reorganized chemistry based upon what is known as "Avogadro's Law"; and then he will learn that the term *imponderable* agents is now regarded as a scientific absurdity. The latest conclusions at which modern chemistry has arrived, it seems, have brought it to reject the word *imponderable*, and to make away with those text-

<sup>&</sup>lt;sup>1</sup> [A modern statement of Avogadro's Law is that equal volumes of all gases, at the same temperature and pressure, have the same number of molecules.]

books of pre-modern science, which refer the phenomena of heat and electricity to attenuated forms of matter. Nothing, they hold, can be added to, or subtracted from bodies without altering their weight. This was said and written in 1876, by one of the greatest chemists in America. With all that, have they become any the wiser for it? Have they been able to replace by a more scientific theory the old and tabooed "phlogiston theory" of the science of Stahl, Priestley, Scheele, and others? — or, because they have proved, to their own satisfaction, that it is highly unscientific to refer the phenomena of heat and electricity to attenuated forms of matter have they succeeded at the same time in proving what are really, Force, Matter, Energy, Fire, Electricity — LIFE? The *Phlogiston* of Stahl<sup>1</sup> — a theory of combustion taught by Aristotle and the Greek philosophers — as elaborated by Scheele, the poor Swedish apothecary, a secret student of Occultism, who, as Professor Cooke says of him, "added more knowledge to the stock of chemical science in a single year than did Lavoisier in his lifetime," was not a mere fanciful speculation, though Lavoisier was permitted to taboo and upset it.<sup>2</sup> But, indeed, were the high priests of modern science to attach more weight to the essence of things than to mere generalizations, then, perhaps, would they be in a better position to tell the world more of the "ultimate structure of matter" than they now are. Lavoisier, as it is well known, did not add any new fact of prime importance by upsetting the phlogiston theory, but only added "a grand generalization." But the Occultists prefer to hold to the fundamental theories of ancient sciences. No more than the authors of the *old* theory, do they attach to phlogiston which has its specific name as one of the attributes of  $\bar{A}k\bar{a}$   $\acute{a}$  — the idea of weight which the uninitiated generally associate with all matter. And though to us it is a principle, a well-defined essence, whereas to Stahl and others it was an undefined essence — yet, no more than we, did they view it as matter in the sense it has for the present men of science. As one of their modern professors puts it:

Translate the phlogiston by energy, and in Stahl's work on Chemistry and Physics, of 1731,<sup>3</sup> put *energy* where he wrote *phlogiston*, and you have . . . our great modern doctrine of conservation of energy.

Verily so; it is the "great modern doctrine," only — plus something else, let me add. Hardly a year after these words had been pronounced, the discovery by Professor Crookes of radiant matter — of which, further on — has nigh upset again all their previous theories.

"Force, energy, physical agent, are simply different words to express the same idea," observes our critic. I believe he errs. To this day the men of science are unable to agree in giving to electricity a name, which would convey a clear and comprehensive

Georg Ernst Stahl, 1659–1734, German chemist, physician and philosopher.

<sup>&</sup>lt;sup>2</sup> [This term is derived from the Greek *phlogistos*, burnt, inflammable, and *phlogizein*, to set on fire, to burn. It is a term used for the hypothetical principle of fire, or inflammability, regarded as a material substance. The term was proposed by Stahl, who, with J.J. Becher, advanced the phlogiston theory. According to them, every combustible substance is a compound of phlogiston, and the phenomena of combustion are due to the phlogiston leaving the other constituent behind. Similarly, metals are produced from their calces by the union of the latter with phlogiston. While abandoned now, the theory is not altogether without worth, and has occult implications. — Boris de Zirkoff.]

<sup>&</sup>lt;sup>3</sup> [Philosophical Principles of Universal Chemistry or the foundation of a scientific manner of inquiring in and preparing the natural and artificial body for the uses of life: both in the smaller way of experiment, and in the larger way of business. Designed as a general introduction to the knowledge and practice of Artificial Philosophy or Genuine Chemistry in all its branches, MDCCXXX

definition of this "very mysterious agent," as Professor Balfour Stewart calls it. While the latter states that electricity or "electrical attraction may PROBABLY be regarded as peculiarly allied to that force which we call chemical affinity"; and Professor Tyndall calls it "a mode of motion," Professor A. Bain regards electricity as one of the five chief powers or forces in nature: "One mechanical or molar, the momentum of moving matter," the others "molecular, or embodied in the molecules, also SUPPOSED (?) in motion — these are, heat, light, chemical force, electricity." Now these three definitions would not gain, I am afraid, by being strictly analysed.

No less extraordinary appears a certain conclusion "A Theosophist" arrives at. Having reminded us that by no "scientific apparatus yet known, is it practicable to weigh a ray of light"; he yet assures us, that . . . "the universal ether of science, which exists in extreme tenuity, can be proved to possess some weight." This assertion made in the face of those who regard ether as a reality, and who know that since it pervades the densest solids as readily as water does a sponge, it cannot, therefore, be confined — sounds strange indeed; nor can the assumption be supported by modern Science. When she succeeds to weigh her purely hypothetical medium, the existence of which is so far only a convenient hypothesis to serve the ends of her undulatory theory, we will have, indeed, to bow before her magic wand. Since our Brother is so fond of quoting from authorities, let him quote next time the following:

Whether there are such things as waves of ether or not, we represent these dimensions to our imagination as wave lengths . . . and every student of physics will bear me out . . . that though our theory may only be a phantom of our scientific dreaming, these magnitudes must be the dimensions of something. <sup>2</sup>

It becomes rather difficult, after such a public confession, to believe that science can *prove* the universal ether "to possess some weight."

On the other hand, our critic very correctly doubts whether there ever was any instrument devised "to weigh a ray of light"; though he as incorrectly persists in calling light "a force, or energy." Now I beg to maintain that, even in strict accordance with modern science, which can be shown to misname her subjects nine times out of ten, and then to keep on naively confessing it, without making the slightest attempt to correct her misleading terms - light was never regarded as "a force." It is, says science, a "manifestation of energy," a "mode of motion" produced by a rapid vibration of the molecules of any light-giving body and transmitted by the undulations of ether. The same for heat and sound, the transmission of the latter depending, in addition to the vibrations of ether, on the undulations of an intervening atmosphere. Professor Crookes thought at one time that he had discovered light to be a force, but found out his mistake very soon. The explanation of Thomas Young of the undulatory theory of light holds now as good as ever, and shows that what we call light is simply an impression produced upon the retina of the eye by the wave-like motion of the particles of matter. Light, then, like heat — of which it is the crown — is simply the ghost, the shadow of matter in motion, the boundless, eternal, infinite SPACE, MOTION and DURATION, the trinitarian essence of that which the Deists call God, and

-

<sup>&</sup>lt;sup>1</sup> The Correlations of Nervous and Mental Forces

Magnitudes of Ether Waves, p. 25

we — the One Element; Spirit-matter, or Matter-spirit, whose septenary properties we circumscribe under its triple abstract form in the equilateral triangle. If the mediaeval Theosophists and the modern Occultists, call the Spiritual Soul — the *vahan* [vehicle] of the seventh, the pure, immaterial spark — "a fire taken from the eternal ocean of light," they also call it in the esoteric language "a pulsation of the Eternal Motion"; and the latter cannot certainly exist *outside* of matter. The men of science have just found out "a *fourth* state of matter," whereas the Occultists have penetrated ages ago beyond the *sixth*, and, therefore, do not infer but KNOW of the existence of the *seventh* — the last. Professor Balfour Stewart, in seeking to show light an energy or force, quotes Aristotle, and remarks that the Greek philosopher seems to have entertained the idea that,

. . . light is not a body, or the emanation of any body (for that, Aristotle says, would be a kind of body) and that, therefore, light is an energy or act.

To this I respectfully demur and answer, that if we cannot conceive of movement or motion without force, we can conceive still less of an "energy or act" existing in boundless space from the eternity, or even manifesting, without some kind of body. Moreover, the conceptions about "body" and "matter" of Aristotle and Plato, the founders of the two great rival schools of antiquity, opposed as they were in many things to each other, are nevertheless still more at variance with the conceptions about "body" and "matter" of our modern men of science. The Theosophists, old and modern, the Alchemists and Rosicrucians have ever maintained that there were no such things per se as "light," "heat," "sound," "electricity"; least of all — could there be a vacuum in nature. And now the results of old and modern investigation fully corroborate what they had always affirmed, namely, that in reality there is no such thing as a "chemical ray," a "light ray," or a "heat ray." There is nothing but radiant energy; or, as a man of science expresses it in the Scientific American,<sup>2</sup> radiant energy — "motion of some kind, causing vibrations across space of something between us and the sun — something which, without understanding fully [verily so!], we call 'ether,' and which exists everywhere, even in the 'vacuum' of a radiometer." The sentence [though] confused, is none the less, the last word of science. Again: "We have always one and the same cause, radiant energy, and we give this one thing different names, 'actinism,' 'light,' or 'heat.'" And we are also told that the miscalled chemical or actinic rays, as well as those which the eye sees as blue or green, or red, and those which the thermometer feels — "are all due to one thing — motion of the ether."

Now the sun and ether being beyond dispute *material* bodies, necessarily every one of their effects — light, heat, sound, electricity, etc. — must be, agreeably to the definition of Aristotle (as accepted, though slightly misconceived, by Professor Balfour Stewart) also "a kind of body," *ergo* — MATTER.

But what is in reality Matter? We have seen that it is hardly possible to call electricity a force, and yet we are forbidden to call it matter under the penalty of being called unscientific! Electricity has no weight — "a Theosophist" teaches us — *ergo* it cannot

-

 $<sup>^{</sup>f 1}$  [See "The last three Root-Races," in our Secret Doctrine's Third Proposition Series. — ED. PHIL.]

<sup>&</sup>lt;sup>2</sup> "The Sun's Radiant Energy," by Prof. S.P. Langley, *Scientific American*, Vol. 41, July 26th, 1879, p. 53

be matter. Well, there is much to be said on both sides. Mallet's experiment, which corroborated that of Pirani (1878), showed that electricity is under the influence of gravitation, and must have, therefore, some weight. A straight copper wire — with its ends bent downward — is suspended at the middle to one of the arms of a delicate balance, while the bent ends dip in mercury. When the current of a strong battery is passed through the wire by the intervention of the mercury, the arm to which the wire is attached, although accurately balanced by a counterpoise, sensibly tends downward, notwithstanding the resistance produced by the buoyancy of the mercury. Mallet's opponents who tried at the time to show that gravitation had nothing to do with the fact of the arm of the balance tending downward, but that it was due to the law of attraction of electric currents; and who brought forward to that effect Barlow's theory of electric currents and Ampère's discovery that electric currents, running in opposite directions, repel one another and are sometimes driven upward against gravitation — only proved that men of science will rarely agree, and that the question is so far an open one. This, however, raises a side issue as to what is "the law of gravitation." The scientists of the present day assume that "gravitation" and "attraction" are quite distinct from one another. But the day may not be far distant when the theory of the Occultists that the "law of gravitation" is nothing more or less than the "law of attraction and repulsion," will be proved scientifically correct.

Science may, of course, if it so pleases her, call electricity a force. Only by grouping it together with light and heat, to which the name of force is decidedly refused, she has either to plead guilty of inconsistency, or to tacitly admit that it is a "species of matter." But whether electricity has weight or not, no true scientist is prepared to show that there is no matter so light as to be beyond weighing with our present instruments. And this brings us directly to the latest discovery, one of the grandest in science, I mean Mr. Crookes' "radiant matter" or — as it is now called THE FOURTH STATE OF MATTER.

That the three states of matter — the solid, the liquid and the gaseous — are but so many stages in an unbroken chain of physical continuity, and that the three correlate, or are transformed one into the other by insensible gradations, needs no further demonstration, we believe. But what is of a far greater importance for us, Occultists, is the admission made by several great men of science in various articles upon the discovery of that fourth state of matter. Says one of them in the *Scientific American*:

There is nothing any more improbable in the supposition that these three states of matter do not exhaust the possibilities of material condition, than in supposing the possibilities of sound to extend to aerial undulations to which our organs of hearing are insensible, or the possibilities of vision to ethereal undulations too rapid or too slow to affect our eyes as light.

And, as Professor Crookes has now succeeded in refining gases to a condition so ethereal as to reach a state of matter "fairly describable as ultra-gaseous, and exhibiting an entirely novel set of properties," why should the Occultists be taken to task for affirming that there are beyond that "ultra gaseous" state still other states of matter; states, so ultra refined, even in their grosser manifestations — such as electricity under all its known forms — as to have fairly deluded the scientific senses, and let the happy possessors thereof call electricity — a Force! They tell us that it is

obvious that if the tenuity of some gas is very greatly increased, as in the most perfect vacua attainable, the number of molecules may be so diminished, that their collisions under favourable conditions may become so few, in comparison with the number of masses, that they will cease to have a determining effect upon the physical character of the matter under observation. In other words, they say, "the free flying molecules, if left to obey the laws of kinetic force without mutual interference, will cease to exhibit the properties characteristic of the gaseous state, and take on an entirely new set of properties." This is RADIANT MATTER. And still beyond, lies the source of electricity — still MATTER.

Now it would be too presumptuous on our part to remind the reader, that if a *fourth* state of matter was discovered by Professor Crookes, and a *fourth* dimension of space by Professor Zöllner, both individuals standing at the very fountainhead of science, there is nothing impossible that in time there will be discovered a fifth, sixth, and even *seventh* condition of matter, as well as seven senses in man, and that all nature will finally be found septenary, for who can assign limits to the possibilities of the latter! Speaking of his discovery, Professor Crookes justly remarks, that the phenomena he has investigated in his exhausted tubes reveal to physical science a new field for exploration, a new world —

A world, wherein matter exists in a fourth state, where the corpuscular theory of light holds good, and where light does not always move in a straight line, but where we can never enter, and in which we must be content to observe and experiment from without.

To this the Occultist might answer, "if we can never enter it, with the help of our physical senses, we have long since entered and even gone beyond it, carried thither by our spiritual faculties and in our *spiritual* bodies."

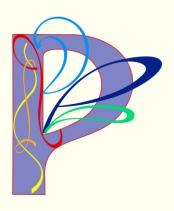
And now I will close the too lengthy article with the following reflection. The ancients never *invented* their myths. One, acquainted with the science of occult symbology, can always detect a scientific *fact* under the mask of grotesque fancy. Thus one, who would go to the trouble of studying the fable of  $Electra^1$  — one of the seven Atlantides — in the light of occult science, would soon discover the real nature of Electricity, and learn that it signifies little whether we call it Force or Matter, since it is both, and so far, in the sense given it by modern science, both terms may be regarded as misnomers. Electra, we know, is the wife and daughter of Atlas the Titan, and the son of Asia and of Pleione, the daughter of the Ocean. . . . As Professor Le Conte well remarks:

There are many of the best scientists who ridicule the use of the term vital force, or vitality, as a remnant of superstition; and yet the same men use the words gravity, magnetic force, chemical force, physical force, electrical force, etc.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> [See our edition in the same Series. — ED. PHIL.]

<sup>&</sup>lt;sup>2</sup> [Summarized from Joseph Le Conte's Evolution and its Relation to Religious Thought (1888), Part 3, ch. iv, p. 299 fn. — Boris de Zirkoff.]

— and are withal unable to explain what is life, or even electricity; nor are they able to assign any good reason for that well-known fact that when an animal body is killed by lightning, after death the blood does not coagulate. Chemistry, which shows to us every atom, whether organic or inorganic in nature susceptible to polarization, whether in its atomic mass or as a unit, and inert matter allied with gravity, light with heat, etc. — hence as containing latent electricity — still persists in making a difference between organic and inorganic matter, though both are due to the same mysterious energy, ever at work by her own occult processes in nature's laboratory, in the mineral no less than in the vegetable kingdom. Therefore do the Occultists maintain that the philosophical conception of spirit, like the conception of matter, must rest on one and the same basis of phenomena, adding that Force and Matter, Spirit and Matter, or Deity and Nature, though they may be viewed as opposite poles in their respective manifestations, yet are in essence and in truth but one, and that life is present as much in a dead as in a living body, in the organic as in the inorganic matter. This is why, while science is searching still and may go on searching forever to solve the problem "What is life?" the Occultist can afford to refuse taking the trouble, since he claims, with as much good reason as any given to the contrary, that Life, whether in its latent or dynamical form, is everywhere. That it is as infinite and as indestructible as matter itself, since neither can exist without the other, and that electricity is the very essence and origin of — Life itself. "Purush" is non-existent without "Prakriti"; nor, can Prakriti, or plastic matter have being or exist without Purush, or spirit, vital energy, LIFE. Purush and Prakriti are in short the two poles of the one eternal element, and are synonymous and convertible terms. Our bodies, as organized tissues, are indeed "an unstable arrangement of chemical forces," plus a molecular force — as Professor Bain calls electricity — raging in it dynamically during life, tearing asunder its particles, at death, to transform itself into a chemical force after the process, and thence again to resurrect as an electrical force or life in every individual atom. Therefore, whether it is called Force or Matter, it will ever remain the Omnipresent Proteus of the Universe, the one element — LIFE — Spirit or Force at its negative, Matter at its positive pole; the former the MATERIO-SPIRITUAL, the latter, the MATERIO-PHYSICAL Universe — Nature, Svabhāva or INDESTRUCTIBLE MATTER.



## **Appendices**

#### 1. Syabhaya is the occult term for Kama-Eros.

Svabhāva is the occult term for Kāma-Erōs, "the mutable radiance of the Immutable Darkness unconscious in Eternity." See how Master K.H., explains this term to A.O. Hume, June 30<sup>th</sup> and July 10<sup>th</sup>, 1882, and contrasts Svabhāva with Fohat: <sup>2</sup>

To comprehend my answers you will have first of all to view the eternal Essence, the Svabhāva, not as a compound element you call spirit-matter, but as the one element for which the English has no name. It is both passive and active, pure Spirit Essence in its absoluteness and repose, pure matter in its finite and conditioned state — even as an imponderable gas or that great unknown which science has pleased to call Force.<sup>3</sup>... The force there is not transformed into something else, as I have already shown in my letter, but with each development of a new centre of activity from within itself multiplies ad infinitum without ever losing a particle of its nature in quantity or quality. Yet acquiring as it progresses something plus in its differentiation. This "force" so-called, shows itself truly indestructible but does not correlate and is not convertible in the sense accepted by the Fellows of the R.S., but rather may be said to grow and expand into "something else" while neither its own potentiality nor being are in the least affected by the transformation. Nor can it well be called force since the latter is but the attribute of Yin-sin (Yin-sin or the one "Form of existence," also Ādi-Buddhi or Dharmakāya, the mystic, universally diffused essence) when manifesting in the phenomenal world of senses, namely, only your old acquaintance Fohat. . . . The initiated Brahmin calls it (Yin-sin and Fohat) Brahman and Shakti when manifesting as the force. We will perhaps be near correct to call it infinite life and the source of all life visible and invisible, an essence inexhaustible, ever present, in short Svabhāva. (S. in its universal application, Fohat when manifesting throughout our phenomenal world, or rather the visible universe, hence in its limitations).4



Secret Doctrine, I p. 635

<sup>&</sup>lt;sup>2</sup> Cf. C.A. Bartzokas (*Comp.* & *Ed.*). *Compassion: The Spirit of Truth*, Gwernymynydd: Philaletheians UK, 2005; v. 05.88.2021. Appendix E: "Mūlaprakriti: aspects, epithets, synonyms," *p.* 349. Also cf. "Lao Tzu on Svabhāva-Tao," *Secret Doctrine*, I *p.* 350.

Mahatma Letter 11 (65) p. 60; 3<sup>rd</sup> Combined ed.

<sup>&</sup>lt;sup>4</sup> *ibid.*, 15 (67) *pp.* 88-89; 3<sup>rd</sup> Combined ed.

#### SECRET DOCTRINE'S FIRST PROPOSITION SERIES APPENDICES

#### 2. Quick overview of the key concepts.

- Life, whether in its latent or dynamic form, is Electricity, i.e., Force or "Spirit" moving Matter.<sup>1</sup>
- Spirit is a bright flame within a transparent globule its vehicle or soul.
- What we call light is an impression produced upon the retina by the wave-like motion of the particles of matter. Light, like heat of which the former is the crown, is simply the ghost, the shadow of matter in motion, the boundless, eternal, Infinite Space-Motion-Duration, the Trinitarian essence of that which the Deists call God, and we the One Element.
- Spirit and Matter are two poles of One Eternal Element, they are interdependent and mutually convertible.
- Force and Matter, Spirit and Matter, or Deity and Nature, though they may be viewed as opposite poles in their respective manifestations, in essence and in truth are One.
- Life is present as much in a dead as in a living body, in inorganic as in organic matter.



.

 $<sup>^{</sup>f 1}$  [See "Virgil's mens agitat molem" in our Mystic Verse and Insights Series. — ED. PHIL.]

#### 3. Kosmos and Cosmos compared and contrasted.

Kosmos	Cosmo

Abstract and Formless, because Homogeneous and Impartite, vehicle of all Universes to be.

Receptive Nature or concrete World of Forms seemingly fragmented, "no better than an aberration of the ever-deceiving physical senses."

All Universes and Solar Systems.

Our Solar System.

Boundless, because Omnipresent and Changeless.

Finite, Impermanent, Self-modifying World.

Created by the One Life, an "Intra-Cosmic Breath."

Guided by "Thyan-kam," the power or knowledge of guiding the impulses of cosmic energy in the right direction.

Directed and controlled by the "Army" of Divine Sentient Beings.

Built and ruled by Sidereal Planetary Spirits and Deities.

Eternal (Spiritual) Egg and Womb or Matri-Padma, Mother Lotus, of all Worlds to be.

Periodical (Mundane) Egg of our World fructified, yet immaculate, when a ray from the First Logos flashes from the latent Germ in the Heart of the Eternal.

Ever-concealed, unknown and unknowable noumena.

Perceptions and visible phenomena after a "Night of Brahmā."

"Father" Concealed and Unmanifested, The "Unknown God" of the Athenians. Plato's Second God, giving birth to a "Son" or Universe.

Kala-hamsa, a Ray of Parabrahman.

Brahmā or Third Logos.

Manvantaric manifestation as a whole.

Phenomena of a Planetary System.

Out of space and time.

In space and time.

Pythagorean higher decad or Light.

Pythagorean lower decad or Life.

Universal Kosmos of All — Τά Πάντα.

Macrocosmos of our Solar System.

Universal One and Secondless Soul.

Periodical Great Universal Soul (Maha-Buddhi), containing multifarious aspects and reminders of *That* One Soul.

#### Suggested reading for students.1



#### From our Secret Doctrine's First Proposition Series.

- ALCHEMY IS THE QUINTESSENCE IN NATURE'S HIGHEST CORRELATIONS
- ALLEGORIES AND MYTHS UNDERLYING PURANIC COSMOLOGY
- BLAVATSKY AND MEAD ON THE GOSPEL ACCORDING TO JOHN
- CROSS IS THE SYMBOL OF PRE-COSMIC DIVINE MIND
- DIAGRAM 1 HINDU COSMOGONY
- DIAGRAM 2 CHALDEO-JEWISH COSMOGONY
- DIAGRAM 3 THE IDEAL TRIAD AND ITS REFLECTION
- DIAGRAM 4 THE WHEEL OF EZEKIEL
- DRAWING 0 BESTRIDE THE BIRD OF LIFE
- DRAWING 1 THE SEVENTEEN-RAYED SUN
- DRAWING 2 THE WINGED SUN
- FOHAT IS THE LIFE OF THE UNIVERSE
- HERMES' DIVINE PYMANDER TR. EVERARD
- HERMES' VIRGIN OF THE WORLD TR. KINGSFORD & MAITLAND
- HINDU VS. CHALDEO-JEWISH COSMOGONY
- HOW VIBRATION BRINGS FORTH SOUND, FORM, AND COLOUR
- INERTIA, THE GREAT OCCULT FORCE
- INFINITE IS THE CREATIVE POTENCY OF FEMININE LOGOS
- JUDGE ON THE GITA AND THE ZODIAC
- LUNAR MYTH AND WORSHIP THROUGH THE AGES
- MAHANARAYANA UPANISHAD TR. VIMALANANDA
- PROPOSITION 1 AKASHA VS. ASTRAL LIGHT
- PROPOSITION 1 BESTRIDE THE BIRD OF LIFE
- PROPOSITION 1 CENTRE + CIRCLE

Students should be fully conversant with the metaphysical concepts and learning aids set out in our Secret Doctrine's Propositions Series 2 and 3. — ED. PHIL.

## WHAT IS MATTER AND WHAT IS FORCE? SUGGESTED READING FOR STUDENTS

- PROPOSITION 1 CHAOS TO SENSE, LATENT DEITY TO REASON
- PROPOSITION 1 CHURNING THE OCEAN OF MILK
- PROPOSITION 1 CROSS + FIRE
- PROPOSITION 1 DAWN OF CHAOS-THEOS-KOSMOS
- PROPOSITION 1 DESIRE PROPER IS BEING
- PROPOSITION 1 DIAGRAM
- PROPOSITION 1 DIAGRAM NOTES<sup>1</sup>
- PROPOSITION 1 ETYMOLOGY OF CONSCIOUSNESS
- PROPOSITION 1 GOD DWELLS IN THE HEART
- PROPOSITION 1 LIGHT DROPS ONE SOLITARY RAY (DRAWING)
- PROPOSITION 1 NARAYANA FIRST OR THIRD LOGOS?
- PROPOSITION 1 NOAH IS LOGOS
- PROPOSITION 1 ONE LIGHT FOR ALL
- PROPOSITION 1 SUN IS THE MIRROR OF FIRE
- PROPOSITION 1 THE INEFFABLE NAME
- PROPOSITION 1 THE MYSTERY OF BEING
- PROPOSITION 1 THE ROPE OF THE ANGELS
- PROPOSITION 1 THE SEVEN ETERNITIES
- PROPOSITION 1 THE SEVEN FORCES OF NATURE
- PROPOSITION 1 THE SEVEN RAYS OF THE SUN
- PROPOSITION 1 TIME WAS NOT
- SONA, THE INDIAN RED RIVER, KEEPS WANDERING OFF ITS BED
- SQUARING THE CIRCLE IN HEAVEN
- TETRAGRAMMATON IS THE KEY TO OCCULT THEOGONY
- THE ATOMS OF SCIENCE ARE THE VIBRATIONS OF OCCULTISM
- THE COSMOGONY OF THE KALEVALA IS A FAITHFUL ECHO OF THE SECRET DOCTRINE
- THE HINDU PANTHEON DRESSED IN BIBLICAL GARB
- THE HOLY FOUR OF PYTHAGORAS
- THE MONADS OF LEIBNIZ ARE THE JIVAS OF OCCULTISM
- THE SIX-POINTED AND FIVE-POINTED STARS
- THE ZODIAC IS A VEIL THROWN OVER COSMOGENESIS
- THEOSOPHICAL JEWELS COSMOGENESIS FOR BABIES

Published under the title "How the Heavenly Snails clothed themselves in the Fabric of Darkness."

## WHAT IS MATTER AND WHAT IS FORCE? SUGGESTED READING FOR STUDENTS

- THEOSOPHICAL JEWELS COSMOGENESIS FOR GROWN-UPS
- VAST IS THE ANTIQUITY AND UNIVERSALITY OF THE ZODIAC
- WORLDS OF BEING EASTERN AND KABBALISTIC COSMOGONIES ARE IDENTICAL
- WORLDS OF BEING THE ONE RAY STRIDES THROUGH 7 REGIONS IN 3 STEPS
- WORLDS OF BEING THE PYTHAGOREAN WORLD, ROOT OF ILLUSION



#### On Atomon or Atmeton, the Greek words for Indivisible.1

- KOSMOS AND COSMOS
  - in our Confusing Words Series.
- NOUS AUGOEIDES OF THE NEOPLATONISTS
- THE VOICE OF THE WILL IS THE ATOMIC POINT, THE LOGOS OF THE SILENT ALL
  - in our Constitution of Man Series.
- KOSMOS IS ETERNAL NOETIC MOTION UNMANIFESTED, THE GREAT BREATH OF THE ONE ELEMENT
  - in our Secret Doctrine's Second Proposition Series.
- ADVENTURES AND PEREGRINATIONS OF THE METAPHYSICAL ATOM
  - in our Secret Doctrine's Third Proposition Series.



<sup>&</sup>lt;sup>1</sup> The Atom may be described as a compact or crystallized point of Divine Energy and Ideation. Molecule is an imprisoned force: it exists periodically and, being divisible, is regarded as illusion. Monas is the Pythagorean name for Hermetic Fire, the quintessence of Life. — ED. PHIL.