

The Connecting Link Between Mind and Matter Keely's Progress - Part 2

by Clara Jessup Moore

Reprinted from "Theosophical Siftings" Volume 5

The Theosophical Publishing Society, England

The elements of nature are made of the Will of God.

HERMES TRISMEGISTUS

All truth comes by inspiration.

SCRIPTURE

We must become as little children, not presuming to think of causes efficient or causes final, for these are things we cannot grasp; but, reverently and patiently waiting until, like a revelation, the hidden link between the familiar and the unfamiliar flashes into our mind, and thus an additional step is gained in the endless series of successive generalizations.

The REV. H. W. WATSON, D. Sc., F.R.S., President of the Birmingham Philosophical Society. [Page 8]

IN the paper of the Rev. H. W. Watson, on "The Progress of Science, its Conditions and limitations", he tells us that every thinking man recognizes the subjective Self and the objective non-Self, and that this non-Self, so far as it manifests its existence through the senses, is the object of investigation of natural philosophers; but he admits that their investigations have not bestowed upon modern science any results to justify the language of causation. Universal gravitation is declared to be a vast generalization, telling us that there is no more, but yet just as much, of mystery in the whole sequence of astronomical phenomena, as in the most humdrum processes of every-day experiences. The unfamiliar has been explained by the familiar, and both remain in their original mystery. This mystery attendant upon gravitation Kepler prophesied would be revealed to man in this age: and the cautions and inductive investigations which Keely has been pursuing since 1888, have enabled him to demonstrate that the unknown force, which for fifteen years had baffled all his skill, is the same condition of sympathetic vibration which controls nature's highest and most general operations: — the identical force which Faraday divined when he wrote, in 1836:

"Thus, either present elements are the true elements, or else there is the probability before us of obtaining some more high and general power of [Page 9] nature even than electricity, and which at the same time might reveal to us an entirely new grade of the elements of matter, now hidden from our view and almost from our suspicion".

It was good advice given by the late Professor Clifford, — "Before teaching any doctrine wait until the

nature of the evidence can be understood". But without attempting to teach Keely's system of vibratory physics, we may look into some of his views, notwithstanding the fact that, whatever truths there may be in them, they are approached from such a different stand-point than that of the platform of mechanical physics, that it is utterly impossible to bring them into any definite relations with each other. Dr. Gérard, of Paris, in his work on "Nervous Force", writes of this founder of a new system of philosophy: "The force discovered by Keely appears to me to be so entirely the counterpart of what passes primarily in the brain cells that we see in him but a plagiarist of cerebral dynamics — that is, he has had but to copy the delicate human mechanism to make a wonderful discovery; probably, the greatest the world has ever known. The word plagiarist has no deprecatory meaning as applied to the great American Inventor, for he must possess an extraordinary power of assimilation to read so fluently the open book of nature, and to be able wisely to interpret her admirable laws: it is, therefore, with profound admiration that I here render homage to this man of science".

Dr. Gérard's work treats of the production of electricity in the nerve centres, and its accumulation in storage. He says that fifty years ago it would have been difficult to explain this fact intelligently; but thanks to the scientific progress of the period, everyone now knows how electricity is produced, and how applied, to use in lighting our houses. He continues: "Let us say, then, in few words, how matters stand, for it will serve to illustrate how it is with our brain, the mechanism of which is precisely the same — only that our apparatus is much more perfect and much less costly.

"A dynamo-electric machine is placed at any given spot, its object, being put in action, is to withdraw from the earth its neutral electricity to decompose it into its two conditions, and to collect, upon accumulators, the electricity thus separated. As soon as the accumulators are charged, the electricity is disposable; that is, our lamps can be lighted. But what is marvellous in all this is that the forces of nature can be transformed at will. Should we not wish for light, we turn a knob and we have sound, heat, motion, chemical action, magnetism. Little seems wanting to create intelligence, so entirely do these accumulated forces lend themselves to all the transformations which their [Page 10] engineer may imagine and desire. But let us consider how greatly superior is our cerebral mechanism to all invented mechanism. In order to light a theatre we require a wide space, a dynamo-electric machine of many horse-power, accumulators, filling many receptacles, a considerable expense in fuel, and clever mechanics. In the human organism these engines are in miniature, one décimètre cube is all the space occupied by our brain; no wheels, no pistons, nothing to drive the apparatus, we suffice ourselves. In this sense, each of us can say, like the philosopher Biaz: — *Omnia mecum porto*. "Our cerebral organ not only originates motion, heat, sound, light, chemical actions, magnetism; but it produces psychic forces, such as will, reasoning, judgment, hatred, love, and the whole series of intellectual faculties. They are all derived from the same source, and are always identical to each other, so long as the cerebral apparatus remains intact. The variations of our health alone are capable of causing a variation in the intensity and quality of our productions.

"With a maximum of physical and moral health, we produce a maximum of physical and moral results. Our manual labour and our intellectual productions are always exactly proportionate to the integrity of our mechanism."

Dr. Gérard has, it will be seen, grasped the same truth that Buckle enunciated in his lecture, "The Influence of Women on the Progress of Knowledge", when he affirmed that not one single discovery that had ever been made has been connected with the laws of the mind that made it; declaring that until this

connection is ascertained our knowledge has no sure basis, as "the laws of nature have their sole seat, origin and function in the human mind". This is the foundation stone of vibratory physics, that all force is mind force.

All the forces of nature, writes Keely, proceed from the one governing force; the source of all life, of all energy. These sympathetic flows, or streams of force, each consists of three currents, harmonic, enharmonic and dominant; this classification governing all orders of positive and negative radiation. The sympathetic flow, called "Animal Magnetism", is the transmittive link of sympathy in the fourth, or interatomic, subdivision of matter. It is the most intricate of problems to treat philosophically; isolated as it is from all approach, by any of the prescribed rules, in "the orthodox scheme of physics". It turns upon the interchangeable subdivision of inter-atomic acting agency, or the force of the mind. The action of this etheric flow, in substances of all kinds, is according to the character of the molecular interferences which exist in the volume of their atomic [Page 11] groupings. These interferences proceed from some description of atomic chemical nature, which tend to vary the uniformity of structure in the atomic triplets of each molecule. If these groupings were absolutely uniform, there would be but one substance in nature, and all beings inhabiting this globe would be simultaneously impressed with the same feelings and actuated by the same desires; but nature has produced unlimited variety. Science, as yet, has not made so much as an introductory attempt to solve this problem of "the mind flow", but has left it with the hosts of impostors, who always beset any field that trenches on the laud of marvel.

Professor Oliver Lodge, in his address before the British Association last August, said: "Let me try to state what this field is, the exploration of which is regarded as so dangerous. I might call it the borderland of physics and psychology. I might call it the connection between life and energy; or the connection between mind and matter. It is an intermediate region, bounded on the north by psychology, on the south by physics, on the east by physiology, and on the west by pathology and medicine. An occasional psychologist has groped down into it and become a metaphysician. An occasional physicist has wandered up into it and lost his base, to the horror of his quondam brethren. Biologists mostly look at it askance, or deny its existence. A few medical practitioners, after long maintenance of a similar attitude, have begun to annex a portion of its western frontier.....Why not leave it to the metaphysicians? I say it has been left to them long enough. They have explored it with insufficient equipment. Their methods are not our methods; they are unsatisfactory to us, as physicists. We prefer to creep slowly from our base of physical knowledge; to engineer carefully as we go, establishing forts, constructing roads and thoroughly exploring the country, making a progress very slow but very lasting. The psychologists from their side may meet us. I hope they will; but one or the other of us ought to begin".

In America, we have Buchanan and many others investigating in this field; and Dr. Bowne, the orthodox Dean of the Boston University, in his answer to Herbert Spencer, answering the question, "What is Force?" tells us: "Not gravitation, nor electricity, nor magnetism, nor chemical affinity, but will, is the typical idea of force. Self-determination, volition is the essence of the only causation we know. Will is the sum-total of the dynamic idea: it either stands for that or nothing. Now science professes itself unable to interpret nature without this metaphysical idea of power. The experiments made by Prof. Barker and others, which are said to establish the identity [Page 12] of heat and mental force really prove only a correlation between heat and the nervous action which attends thinking. Nervous action and heat correlate, but the real point is to prove that nervous action and mental force correlate. This has never been done".

"The concept of will", says Arthur Schopenhauer, "has hitherto commonly been subordinated to that of force; but I reverse the matter entirely, and desire that every force in nature be thought of as will. It must not be supposed that this is mere verbal quibbling and of no consequence: rather it is of the greatest significance and importance".

Thus it will be seen that the field which Professor Lodge, with rare courage, invited his fellow-physicists to enter and bring with them their appropriate methods of investigation, unless these philosophers are astray, may prove to be "the immense and untrodden field" which Buckle said must be conquered before Science can arrogate to herself any knowledge of nature's laws that is not purely empirical. A little reflection will enable the average mind to see in the signs of the times a tendency to movements on a grander scale, such as are involved in the higher view which Keely is himself now taking since his researches have extended beyond the order he was pursuing when he was thinking only of mechanical success. Psychical investigation will be stimulated when Keely has imparted the nature of his discoveries to the physicist [Professor James Dewar] whom he has chosen to instruct. History is but repeating itself in Keely's experiences. In the year 1724, in a letter to the Royal Society, Hatzfeld attacks Sir Isaac Newton in much the same spirit that some newspaper men attack Keely now. One would suppose in reading what Hatzfeld has written, of an invention of his time, that it had been written, word for word, of some of the investigators of Keely's experiments in researching. After commenting upon the corruption of human nature as shown, in his day, by the want of veracity, the tendency to vicious misrepresentation, he says:

"If the said machine was contrived according to the weak sense and understanding of those who pretend it to be moved in other ways than that declared, it would have been discerned before this.

"And those who pretend it to be moved by water, or air, or magnetism, one of which (meaning water) even our most famous author did in the beginning affirm it to be moved by, is so very weak that I don't at all think it deserving to be considered.

"And what is still worse is to pretend it to be a cheat in a manner of proceeding which is neither consistent with equity nor common sense. As long as arts and sciences have the misfortune of depending [Page 13] on the direction of such like persons no progress toward truth can be made but I shall make it sufficiently appear that there is yet more truth behind the hill than ever has been brought to light. There be persons who, when disappointed of gain, turn their shafts against those who have circumvented them.

"All those who know anything of philosophy know that gravity is generally (and chiefly by Sir Isaac Newton and his followers) denied to be essential to matter, which I shall not only prove the contrary of, but I shall likewise show the properties in matter, on which the principle depends, to be the most glorious means to prove the existence of God, and to establish natural religion".

Is it not rather remarkable that, after a sleep of nearly two centuries, it is again claimed that gravity is inherent in all matter?

Professor Rücker, in closing his address read at the last meeting of the British Association, said:

"In studies such as these we are passing from the investigation of the properties of ordinary matter to those of the ether, which may perhaps be the material of which matter is composed. We may some day be able to control and use it, as we now control and use steam."

For nearly fifteen years, Keely constructed engines of various models, with this end in view, before he discovered that it is impossible to use the ether in any other way than as a media for the force which he is now experimenting with; and which he defines in its present operation as a condition of sympathetic vibration, associated with the polar stream positively and negatively. Keely has now made arrangements to instruct an English physicist of high standing in his method of disintegrating water by triple subdivision; acting simultaneously:— showing instantaneous association and dissociation, under a certain form of vibration. Until the instruction has been given, which will put it in the power of the successor of Tyndall and Faraday, at the Royal Institution of Great Britain, to make known the importance of these discoveries to science, Keely must continue to bear the abuse of the prejudiced, the misinformed and the malicious.

A London journal recently erroneously announced that Keely has no theory to go upon. During the "observations" of Keely's researching experiments that were made last year by some of the professors of the University of Pennsylvania, one of them, Prof. Brinton, under date of February 14th, wrote of Keely's theories: — "Mr. Keely has a coherent and intelligent theory of things, or philosophy, on which he lays out his work and proceeds in his experiments". March 6th, the same professor writes: — "Keely's paper on patent Force in intermolecular [Page 14] spaces is clear enough and instructive, but the average reader will find its perusal up-hill work, from lack of preliminary teachings. Naturally, Mr. Keely, whose mind has been busy with this topic for years and is more familiar with it than with any other, does not appreciate how blankly ignorant of it is the average reader. Also, naturally, he writes above the heads of his audience", Again, Prof. Brinton writes, "Mr. Keely's vibratory theory is so simple, beautiful and comprehensive, that I hope it will be proved experimentally to be true. To me, all commercial and practical results, motors, engines, air-ships, are of no importance by the side of the theoretical truth of the demonstration of this cosmic force.....".

It is the Aristotle qualities of Prof. Brinton's mind, in its power of classifying and defining, which has caused it to be said of him that he has touched no subject without throwing light upon it; and the Dean of the Boston University, Dr. Bowne, after reading Prof. Brinton's abstract of Keely's philosophy, said that it had made Keely's hitherto unintelligible theories intelligible to him. "We can apprehend sometimes what we cannot comprehend". As Cardinal Newman has said, "Truth is reached not by reasoning, but by an inward perception. Anyone can reason; only disciplined, educated, formed minds can perceive".

Agnostics make the mistake of confounding exhaustive knowledge with positive knowledge in declaring both unattainable; but we can know positively that a thing is, if not why or how it is. Prof. Brinton has so mastered Keeley's working hypotheses as to write that he was sure he could make them understood by any intelligent person — writing of them — "All that is needed now is to show that Keely's experiments sustain the principles that underlie these hypotheses. As soon as Prof. Koenig is prepared to report on the purely technical and physical character of the experiments, I shall be ready to go into full details as to their significance in reference to both matter and mind. It will be enough for me if Dr. Koenig is enabled simply to say that the force handled by Keely is not any one of the already well-known forces. Let him

say that, and I will undertake to say what it is".

SOME OF KEELY'S THEORIES

"The sympathetic conditions that we call mind are no more immaterial in their character than light or electricity. The substance of the brain is molecular, while the substance of the mind that permeates the brain is inter-etheric, and is the element by which the brain is impregnated; exciting it into action and controlling all the conditions [Page 15] of physical motion, as long as the sympathetic equatative is in harmony, as between the first, second, and third orders of transmission: molecular, atomic and etheric. By this soul substance is the physical controlled. In order to trace the successive triple impulses, taking the introductory one of sympathetic negative outreach, as towards the cerebral neutrals, which awakens the latent element to action, we find that mind may be considered a specific order of inter-atomic motion sympathetically influenced by the celestial flow, and that it becomes, when thus excited by this medium, a part and parcel of the celestial itself. Only under these conditions of sympathetic assimilation can it assert its power over the physical organisms; the finite associated with the infinite.

"The brain is not a laboratory. It is as static as the head of the positive negative attractor" (one of Keely's researching instruments) "until influenced by certain orders of vibration, when it reveals the true character of the outreach as so induced. The brain is the high resonating receptacle where the sympathetic celestial acts, and where molecular and atomic motion exhibits itself, as according to the intensification brought to bear upon it by the celestial mind flow.

"The cerebral forces, in their control of the physical organism, reveal to us the infinite power of the finer or spiritual fluid, though not immaterial, over the crude molecular.

"The luminous, etheric, protoplasmic element, which is the highest tenuous condition of the ether, fills the regions of infinite space, and in its radiating outreach gives birth to the prime neutral centres that carry the planetary worlds through their ranges of motion.

"If the minds of all the most learned sages, of all time, were concentrated into one mind, that one would be too feeble, in its mental outreach, to comprehend the conditions associated with the fourth order of sympathetic condensation. The controversies of the past in regard to the condensation of invisible matter prove this. The chemistry of the infinite and the chemistry of the finite are as wide apart, in their sympathetic ranges, as is the velocity of light from the movement of the hour-hand of a clock. Even the analysis of the visible conditions taxes our highest powers of concentration.

"The question naturally arises, Why is this condition of ether always under a state of luminosity of an especial order?

"Its characteristics are such, from its infinite tenuity and the sympathetic activity with which it is impregnated, that it possesses an order of vibratory, oscillatory velocity, which causes it to evolve its own luminosity. This celestial, latent power, that induces luminosity [Page 16] in this medium, is the same that

registers in all aggregated forms of matter, visible and invisible. It is held in corpuscular embrace until liberated by a compound vibratory negative medium.

"What does this activity represent, by which luminosity is induced in the high etheric realm? Does not the force following permeation by the Divine Will show that even this order of ether, this luminiferous region, is bounded by a greater region still beyond? — that it is but the shore which borders the realm, from which the radiating forces of the Infinite emanate: the luminiferous being the intermediate which transfers the will force of the Almighty towards the neutral centres of all created things, animate and inanimate, visible and invisible; even down into the very depths of all molecular masses. The activity of the corpuscles, in all aggregations, represents the outflow of this celestial force, from the luminiferous track, towards all these molecular centres of neutrality, and reveals to us the connecting link between mind and matter. How plainly are we thus taught that God is everywhere, and at the same time in every place. It gives us a new sense of the omniscience and omnipresence of the Creator. In these researches I am brought so near to the celestial conditions that my pen is ready to fall from my hand while writing on this subject; so more and more sensibly do I feel my abject ignorance of its depths.

"These conditions of luminosity have no thermal forces associated with them; although, paradoxically, all thermal conditions emanate from that source. The tenuity of this element accounts for it. It is only when these sympathetic streams come in conflict with the cruder elementary conditions, either the molecular or atomic, that heat is evolved from its latent state, and a different order of light from the etheric luminous is originated, which has all the high conditions of thermal force associated with it: the sun being the intermediate transmitter. Thus is shown the wonderful velocity of these sympathetic streams emanating from celestial space.

"The sympathetic forces transmitted by our solar planet, to which our earth is so susceptible, are continuously received from the luminiferous realm; the sympathetic volume of which, as expended, is constantly equated by the exhaustless will-force of the Creator. Had the solar energy been subservient to what physicists ascribe it, the sun would have been a dead planet, thousand of centuries ago; as also all planets depending upon it, as an intermediate.

"In fact, all planetary masses are sympathetic-transferring-mediums, or intermediates, of this prime, luminous, dominant element. In the vibratory subdivision of matter, as progressive evolution has [Page 17] been analysed, it is evident that these transfers of sympathetic force extend beyond the limits of our orbital range, from system to system, throughout the realms of space: these progressive systems becoming themselves, after a certain range of sympathetic motion, sympathetic intermediates, as included in the whole of one system, exemplified so beautifully in the cerebral convolutions, with their connective sympathy for each other; transferring as a whole on the focalizing centre, from which it radiates to all parts of the physical organism, controlling in all its intricate variety the sympathetic action, of our movements." (Keely.)

"What is there that we really know?" asks Buckle. "We talk of the law of gravitation, and yet we know not what gravitation is; we talk of the conservation of force and distribution of forces and we know not what forces are." "The vibratory principles now discovered in physics", says Hemstreet, "are so fine and attenuated that they become an analogy to mental or cerebral vibrations". Let us see what Keely's system of vibratory physics says of gravity, cohesion, etc.

What is Gravity? — Gravity is an eternal existing condition in etheric space; from which all visible forms are condensed. Consequently, it is inherent in all forms of matter, visible and invisible. It is not subject to time nor space. It is an established connective link between all forms of matter from their birth, or aggregation. Time is annihilated by it, as it has already traversed space, when the neutral centres of the molecules were established.

Gravity, then, is nothing more than an attractive, sympathetic stream, flowing towards the neutral centre of the earth, emanating from molecular centres of neutrality, concordant with the earth's centre of neutrality, and seeking its medium of affinity, with a power corresponding to the character of the molecular mass.

What is Cohesion? — Cohesion simply implies attraction. It is the negative, vibratory assimilation, or aggregation, of the molecules, acting according to the density or compactness of the molecular groupings on their structures. The differing character of molecular densities, or molecular range of motion, represents differing powers of attraction. The lower the range of motions on the molecular vibrations of these structures, the greater is the attractive force that holds them together; and *vice versa*.

What is Heat? — Heat may be classed as a vibro-atomic element (not exceeding 14,000 vibrations per second at its greatest intensity), residing as a latent element in all conditions of matter, both visible and invisible. The velocity of the sympathetic flows which emanate [Page 18] from our solar world, the sun, coming into contact with our atmospheric medium liberates this element in all the different degrees of intensity that give warmth to our earth. Light is another resultant; the different intensities of which are given according to the different angles of this sympathetic projectment.

The light that emanates from a glow-worm is the resultant of the action of the sympathetic medium of the insect itself, on a centre of phosphorescent matter, which is included in its structure. The resultant of the two conditions are quite different, but they are governed by the same laws of sympathetic percussion.

Radiation is the term used to express the reaching out of the thermal element, after its liberation from its corpuscular imprisonment, to be re-absorbed or returned again to its sympathetic environment; teaching us a lesson in the equation of disturbance of sympathetic equilibrium.

FORCE

"By what means is force exerted, and what definitely is force? Given that force can be exerted by an act of will, do we understand the mechanism by which this is done? And if there is a gap in our knowledge between the conscious idea of a motion and the liberation of muscular energy needed to accomplish it, how do we know that a body may not be moved without ordinary material contact by an act of will?" These questions were asked by Professor Lodge in his paper on "Time"; and as Keely contends that all metallic substances after having been subjected to a certain order of vibration may be so moved, let us see how he would answer these questions. When Faraday endeavoured to elaborate some of his "unscientific notions in regard to force and matter", men of science then said that Faraday's writings were not translatable into scientific language. The same may be said of Keely's writings. Pierson says, "The

very fact that there is about the product of another's genius what you and I cannot understand is a proof of genius, *i.e.*, of a superior order of faculties". Keely, who claims to have discovered the existence of hidden energy in all aggregations of matter, imprisoned there by the infinite velocity of molecular rotation; asserts that "physicists in their mental rambles in the realm of analytical chemistry (analytical as understood by them) have failed to discover the key-note which is associated with the flow of the mental element", that "they have antagonized or subverted all the conditions", in this unexplored territory of negative research, which he has demonstrated as existing in reference to latent energy [Page 19] locked in corpuscular spaces. These antagonisms might have been sooner removed had those physicists who witnessed some of Keely's experiments, while he was still working blindfold, as it were, in past years, not belonged to that class of scientists "who only see what they want to see, and who array facts and figures adroitly on the side of pre-conceived opinion". Since the last meeting of the British Association, Keely, in writing of some of the addresses delivered, says: "it delights me to find that physicists are verging rapidly toward a region which, when they reach, will enable them to declare to the scientific world what they now deny; *viz.*, that immense volumes of energy exist in all conditions of corpuscular spaces. My demonstrations of this truth have been ignored by them; and now they must find it out for themselves. I do not doubt that they will reach it in their own way, I accept Professor Stoney's idea that an apsidal motion might be caused by an interaction between high and low tenuous matter; but such conditions, even of the highest accelerated motion, are too far down below the etheric realm to influence it sympathetically, even in the most remote way. I mean by this that no corpuscular action or interaction can disturb or change the character of etheric undulations. The conception of the molecule disturbing the ether by electrical discharges from its parts, is not correct, as the highest conditions associated with electricity come under the fourth descending order of sympathetic condensation, and consequently its corpuscular realm is too remote to take any part towards etheric disturbance. Hypothesis is one thing and actual experimental demonstration is another; one being as remote from the other as the electrical discharges from the recesses of the molecule are from the tenuous condition of the universal ether. The conjecture as regards the motion being a series of harmonic elliptic ones, accompanied by a slow apsidal one, I believe to be correct. . . . The combination of these motions would necessarily produce two circular motions, of different amplitudes, whose differing periods might correspond to two lines of the spectrum, as conjectured, and lead the experimenter, perhaps, into a position corresponding to an ocular illusion. Every line of the spectrum, I think, consists not of two close lines, but of compound triple lines: though not until an instrument has been constructed, which is as perfect in its parts as is the sympathetic field that environs matter, can any truthful conclusion be arrived at from demonstration". — Keely.

It must be remembered that Keely claims to have demonstrated the subdivision of matter in seven distinct orders: molecular, inter-molecular, atomic, inter-atomic, etheric, inter-etheric, reaching the [Page 20] compound inter-etheric in the seventh order, or the substance of the will. How can such claims be expected to command the attention of men of science, when one of the most liberal among them has said that to say the will is a material thing belongs to the crude materialism of the savage? In commenting further upon the experimental researches of men of science to show whether ether in contact with moving matter is affected by the motion of such matter, Keely writes: "The motion of any matter of less tenuity than the ether cannot affect it, any more than atmospheric air could be held under pressure in a perforated chamber. The tenuous flow of a magnet cannot be waived aside by a plate of heavy glass, and yet the magnetic flow is only of an inter-atomic character and far more crude than the introductory etheric. The etheric element would remain perfectly static under the travel of the most furious cyclone; it would pass through the molecular interstices of any moving projectile with the same facility that atmospheric air would pass through a coarse sieve. Ether could not be affected by the motion of less tenuous matter, but if the matter were of the same tenuous condition it would sympathetically associate itself with it; consequently there would be no motion any more than motion accompanies gravity.

In the same way that the mind flow induces motion on the physical organism, sympathetic flows on molecular masses induce motion on the molecular. The motion of the molecules in all vegetable and mineral forms in nature are the result of the sympathetic force of the celestial mind flow (or the etheric luminous) over terrestrial matter. This celestial flow is the controlling medium of the universe, and one of its closest associates is gravity.....The molecule is a world in itself, carrying with it all the ruling sympathetic conditions which govern the greatest of the planetary masses. It oscillates within its etheric rotating envelope with an inconceivable velocity, without percussing its nearest attendant, and is always held within its sphere of action by the fixed gravital power of its neutral centre, in the same sympathetic order that exists between the planetary worlds. The dissociation of aggregated molecules by intermolecular vibration does not disturb even to an atomic degree these fixed neutral points. Each molecule contributes its quota to the latent electrical force, which shows up by explosion after its gathering in the storm clouds, and then it returns to the molecular embrace it originally occupied. You may call this return, absorption; but it gets there first during corpuscular aggregation, and comes from there, or shows itself, during sympathetic disturbance of equilibrium. [Page 21]

ELECTRICITY

There are three kinds of electricity, the harmonic and enharmonic which, with their leader, the dominant, form the first triple. Their sympathetic associations evolve the energy of matter. The dominant is electricity luminous, or propulsive positive. The harmonic, or the magnetic, which is the attractive, with its wonder of sympathetic outreach, is the negative current of the triune stream. The enharmonic, or high neutral, acts as the assimilative towards the re-instatement of sympathetic disturbance. In electric lighting, the velocity of the dynamos accumulates only the harmonic current — by atomic and interatomic conflict — transferring one two hundred thousandth of the light that the dominant current would give, if it were possible to construct a device whereby it could be concentrated and, dispersed. But this supreme portion can never be handled by any finite mode. Each of these currents has its triple flow, representing the true lines of the sympathetic forces that are constantly assimilating with the polar terrestrial envelope. The rotation of the earth is one of the excitors that disturbs the equilibrium of these sensitive streams. The alternate light and darkness induced by this motion helps to keep up the activity of these streams, and the consequent assimilation and dissimulation. The light zone being ever followed by the dark zone holds the sympathetic polar wave constant in its fluctuations. This fact may be looked upon as the foundation of the fable that the world rests upon a tortoise. The rotation of the earth is controlled and continued by the action of the positive and negative sympathetic celestial streams. Its pure and steady motion, so free from intermitting impulses, is governed to the most minute mathematical nicety by the mobility of the aqueous portion of its structure, *i.e.*, its oceans and oceans anastomosis. There is said to be a grain of truth in the wildest fable, and herein we have the elephant that the tortoise stands on. The fixed gravital centres of neutrality, the sympathetic concordants to the celestial outreach, that exist in the inter-atomic position, are the connective sympathetic links whereby the terrestrial is held in independent suspension. We cannot say that this corresponds to what the elephant stands upon, but we can say, "This is the power whereby the elephant is sympathetically suspended."

— Keely.

THE ATOM

Question asked in Clerk Maxwell's memoirs; — "Under what form, right, or light, can an atom be

imagined?" Keely replies: — It eludes the grasp of the imagination, for it is the introductory step to a conception of the eternity of the duration of matter. The magnitude of the molecule, [Page 22] as compared to the interatom, is about on the same ratio as a billiard ball to a grain of sand; the billiard ball being the domain wherein the triple intermolecules rotate, the intermolecules again being the field wherein the atomic triplets sympathetically act, and again progressively, in the interatomic field, the first order of the etheric triplets begins to show its sympathetic inreach for the centres of neutral focalization. It is impossible for the imagination to grasp such a position. Interatomic subdivision comes under the order of the fifth dimensional space in etheric condensation. Atoms and corpuscles can be represented by degrees of progressive tenuity, as according to progressive subdivision, but to imagine the ultimate position of the atomic alone would be like trying to take a measurement of immeasurable space. We often speak of the borders of the infinite, No matter what the outreach may be, nor how minute the corpuscular subdivision, we still remain on the borders, looking over the far beyond as one on the shore of a boundless ocean who seeks to cross it with his gaze. Therefore, philosophically speaking, as the atom belongs to the infinite and the imagination to the finite, it can never be comprehended in any form or light, nor by any right; for in the range of the imagination it is as a bridge of mist which can never be crossed by any condition that is associated with a visible molecular mass, that is, by mind as associated with crude matter.

SYMPATHETIC OUTREACH

is not induction. They are quite foreign to each other in principle. Sympathetic outreach is the seeking for concordance to establish an equation on the sympathetic disturbance of equilibrium. When a magnet is brought into contact with a keeper, there is no induction of magnetism from the magnet into the keeper. The static force of the magnet remains unchanged, and the action between the two may be compared to a sympathetic outreach of a very limited range of motion. The sympathetic outreach of the moon towards the earth has a power strong enough to extend nearly a quarter of a million of miles to lift the oceans out of their beds. This is not the power of induction. . . .

The sympathetic envelope of our earth owes its volume and its activity entirely to celestial radiating forces. Reception and dispersion are kept up by atomic and interatomic conflict, as between the dominant and enharmonic."

— (Keely.)

HYDROGEN

"The horizon of matter, which has been thought to rest over attenuated hydrogen, may extend to infinite reaches beyond, including stuffs or substances which have never been revealed to the senses. [Page 23] Beings fashioned of this attenuated substance might walk by our side unseen, nor cast a shadow in the noon-day sun." — *Hudson Tuttle*.

"This supposition of itself admits that hydrogen is a compound. If It were indivisible it would assimilate with the high luminous, from which all substances are formed or aggregated. If hydrogen were a simple it could not be confined. No molecular structure known to man can hold the inter-luminous; not even the low order of it that is chemically liberated. The word attenuated admits that hydrogen is a compound. I contend that hydrogen is composed of three elements, with a metallic base, and comes under the order of the second atomic, both in vibration and sympathetic outreach. Hydrogen exists only where planetary

conditions exist: there it is always present, but never in uninterfered space. There is much celestial material that has never been revealed to the senses.

My researches lead me to think that hydrogen carries heat in a latent condition, but I do not believe it will ever be possible to originate a device that will vibrate hydrogen with a velocity to induce it.

The word imponderable as applied to a molecule is incorrect. All gases as well as atmospheric air are molecular in their structures. If atmospheric air is subdivided, by atomic vibration, it merely dissociates the hydrogen from the oxygen; neither of which, though disunited, passes from the inter-molecular state and not until hydrogen is sympathetically subdivided in its intermolecular structure by interatomic vibrations can it assimilate with the introductory etheric element. There is a wonderful variation of gravital sympathy between the gaseous elements of compounds, all of which come under the head of molecular.

— (Keely.)

Under date of October 1st, 1891, Mr. Keely writes: "I see no possibility of failure, as I have demonstrated that my theories are correct in every particular, as far as I have gone; and if I am not handicapped in any way during the next eight months, and my depolarizer is perfect, I will then be prepared to demonstrate the truth of all that I assert in reference to disintegration, cerebral diagnosis, aerial suspension and dissociation, and to prove the celestial gravital link of sympathy, as existing between the polar terrestrial and equation of mental disturbance of equilibrium. It is a broad assertion for one man, and 'an ignorant man' at that, to make; but the proof will then be so overwhelming in its truthful simplicity that the most simple-minded can understand it. Then I will be prepared to give to science and to commerce a system that will elevate both to a position far above that which they now occupy". [Page 24]

Again, Nov. 4, Mr. Keely says: "The proper system for the treatment of cerebral differentiation is not yet known to the physician of today. The dissimilarities of opinion existing, with regard to any case, is confounding. When the true system is recognized, the vast number of physical experimentalists, now torturing humanity, will die a natural death. Until this climax is reached, physical suffering must go on multiplying at the same ratio that experimentalists increase. Molecular differentiation is the fiend that wrecks the physical world, using the seat of the cerebral forces as its intermediate transmitter. It is the devastating dragon of the universe, and will continue to devastate until a St. George arises to destroy it. The system of equating molecular differentiation is the St. George that will conquer. When, my system is completed for commerce, it will be ready for science and art. I have become an excessive night-worker: — giving not less than eighteen hours a day, in times of intensification. I have timed my race for life and I am bound to make it". [The views expressed by Dr. Gérard, as given on p.10 as to the relations existing between our mechanism, and our work of brain and hands, are sustained by Herschel, who wrote:- "The brain and nervous system bear a somewhat close resemblance to a galvanic battery in constant motion, whose duty it is to provide a certain and continuous supply of its special fluid for consumption within a given time. As long as supply and demand are fairly balanced, the functions which owe their regular and correct working to the fluid are carried on with precision; but when, by excessive demands carried far beyond the means of supply, the balance is not only lost but the machine itself is overstrained and injured, disorder first and disease after are the result"]

HOW MR. KEELY, IN 1891, WAS ABLE TO SECURE THE ATTENTION OF MEN OF SCIENCE TO HIS RESEARCHING EXPERIMENTS.

During the summer of 1890, Mr. Keely was harassed by threats, said to proceed from disappointed stockholders in the Keeley Motor Company, of suits at law for obtaining their money under false pretences. After several unsuccessful attempts with the editors of leading magazines in London, Boston, and New York, to have the claims of Mr. Keely upon the public, for sympathy in his colossal work, made known, I accepted the offer of an editor on the staff of the *Times*, to accomplish what I had failed to do. The programme, as laid out by this editor, was to use his extended influence with the leading journals throughout Great Britain, in having brief notices of Keely inserted; to be followed up with a magazine article, for which I furnished the material. Later this arrangement was modified, the editor proposing to write an essay, handling the various molecular and atomic theories; pointing out wherein Keely's views were original and showing their revolutionizing tendencies. This work, which was to have been commenced in November, was delayed until all need was over; and when [Page 25] I received in January, 1892, a letter saying that the editor had been unable to commence his work, for want of sufficient material, which I was requested to forward to him, I answered that Mr. Keely's threatened troubles were over, as the protection of men of science had been gained for him. The Provost of the University of Pennsylvania, has given permission to make public this Preamble, which he read before a distinguished company, of Professors and others, at his house, on the evening of the 14th of January, 1891, followed by an address, setting forth the grounds of faith in the discoveries of Keely, and the nature of his claims. All that was asked for Mr. Keely, in behalf of the interests of science, was conceded for him; and Mr. Keely has been able to continue his researches, up to the present time, without the delays which actions-at-law would have occasioned. As I found, on my return to Philadelphia in November, 1890, that a subscription had been set on foot to raise money from disaffected stockholders, for the purpose of bringing these suits against Mr. Keely, if he did not resume work on an engine, it will be seen that there was no time to be lost after the editor on the *Times* disappointed Mr. Keely. The paper written by Mr. Nisbet, after it had been countermanded, has been read since by several men of science, and is held over to appear, in time, when all that is connected with Keely will have become of interest to the world, and his foes as well as his friends have been classified.

KEELY'S PRESENT POSITION

[Principally from The Philadelphia Enquirer, of April 26th, 1891]

It having been generally understood that Mrs. Moore wished to have physicists investigate Mr. Keely's discoveries, she has requested to have this impression corrected and her true object made known as set down in the preamble to her paper, read at the house of the Provost of the University of Pennsylvania, 14th January, 1891, which is published below with the consent of the Provost. On the 23rd of March Mrs. Moore received a letter from Professor Koenig, in which he wrote :

"With regard to the experiments, which I saw at Mr. Keely's, I venture upon the following suggestion, as a test of the nature of the force Mr. Keely is dealing with. The revolution of the compass as a result of negative polar attraction. It is stated in Mr. Keely's paper that he finds gold, silver, platinum, to be excellent media for the transmission of these triple currents. Now it is well known that these same metals are most diamagnetic, that is unaffected by magnetic influences. If, therefore, a needle be made of one of these metals and suspended in [Page 26] place of the steel needle, in the compass, and put under the

influence of Mr. Keely's force, it ought to revolve the same as the steel needle will under magnetic polar and anti-polar influence. If Mr. Keely could make such a needle revolve, it would convince me that he is dealing with a force unknown to physicists".

To this requirement, Mr. Keely replied: "To run a needle composed of non-magnetic material by polar and depolar action is a matter of as infinite impossibility as would be the raising of a heavy weight from the bottom of a well by sucking a vacuum in it, or the inhalation of water into the lungs, instead of air, to sustain life".

However, it seems that Mr. Keely took up a line of research that was new to him and succeeded in making a needle of the three metals, gold, silver and platinum, rotate by differential molecular action, induced by negative attractive outreach, which is as free of magnetic force as a cork.

Professor Brinton has prepared a paper, undertaking to explain what the force is, which he will himself read at Mrs. Moore's house to those invited, who are present, one evening this week, to hear the result of the observation of Mr. Keely's experiments; — not investigation of them. The result will not be made public, as the object is to influence in no way the price of the stock of the company to which. Mr. Keely is under obligations, and which is, as far as marketable value is concerned, worthless until his system is completed to that point where he is able to patent some one device.

The preamble to Mrs. Moore's paper referred to above is as follows:

"Before commencing to read my paper I wish to lay before you the object of this effort to interest men of science in the researches of a man who, in the cause of justice alone, is entitled to have his life's work fairly represented to you. Some of our men of science have, unwittingly, been the medium by which great injustice has been done to Mr. Keely, and to me also, by placing me before the world as a woman whom the Keely Motor Company management had robbed of large sums of money: whereas, in truth, I have never been in any way involved by the Keely Motor Company.

"In the winter of 1881-82, Mr. Keely, who was dependent upon "The Keely Motor Company" for the means to continue his researches, as to the nature of the unknown force he had discovered, was virtually abandoned by the Company. Himself as ignorant as its managers were of the source of the mysterious energy he had stumbled over, he was driven to despair by their action; and, when I was led to his [Page 27] assistance, I found his wife's roof mortgaged over her head and that he had destroyed the patient labour of years, in researching instruments. With a prison facing him he had resolved to take his life, rather than submit to the indignities threatening him. At this time, I had taken from my private estate a sum to found a small public library to my father's memory, in the village of his birth, Westfield, Massachusetts. After convincing myself that Mr. Keely had made a great discovery, I felt that if this money could save this discovery, jeopardized as it was, it was my duty to so appropriate it. At that time, Mr. Keely thought that half of the amount so appropriated would be all that he should require: but, unfortunately, his efforts were for years confined to the construction of an engine for the Company that had abandoned him. Later, he commenced researches which resulted in the discovery, in 1886, that he had unknowingly imprisoned the ether; greatly increasing my interest in his work.

"The plan to which I shall allude in my paper, as framed by Professor Leidy, for Mr. Keely to follow, and approved by Professor Hertz, of Bonn, and Professor Fitzgerald, of Trinity College, Dublin, may be summed up as one that permits Mr. Keely to pursue his researches on his own line, without further investigation, up to the completion of his system in a form which will enable him to give to commerce with one hand his model for aerial navigation, and to science, with the other, the knowledge that is necessary for extending its researches in the field of radiant energy — which Mr. Keely has been exploring for so many years. I ask the prestige of your sympathy for me, as well as for your interest in Mr. Keely's work, on this basis; and if in one year you are not convinced that satisfactory results have been attained for science, I will promise to leave Mr. Keely in the hands of the 'usurers and Shy-locks of commerce', who have already forced him into renouncing seven-eighths of his interest in what the Keely Motor Company claims as its property

"At present I do not desire from anyone indorsement of Keely's discoveries. Until his system is completed he wishes to avoid all discussion and all public mention of the anticipated value of his inventions. Mr. Keely's programme of experimental research, as laid down by himself, last March, when I first proposed to furnish him with all the funds needed to carry it out, comprises its continuance until he has gained sufficient knowledge of the force that he is controlling — which force is derived from the dissociation of water — to enable him to impart to others a system that will permit men of science to produce and to handle the force, and enable him to instruct artisans in the work [Page 28] which lies in their province, *viz*: the construction of machines to apply this costless motive power in mechanics.

"Only the prestige of your interest in Mr. Keely's researches can secure to him freedom to pursue researches on his own road, a course pronounced by Professor Leidy, Professor Hertz and Professor Fitzgerald to be 'the only proper line for him to pursue'.

"The building of an engine is not in Mr. Keely's province. His researches completed to that point which is necessary for perfect control of the force, practical application will follow. The result of his experimental researches for nine months on this line has been such as to revive the interest of the speculative management of the Keely Motor Company, to that extent that Mr. Keely is now offered the support of its stockholders if he will resume construction of an engine; and this after more than seven years of failure on the part of the company to furnish him with one dollar to carry on his great work.

"The official Report put forth in January by the Keely Motor Company managers annulled my contract with Mr. Keely; but he is willing to abide by it, if I am able to continue to furnish him with the necessary funds. This position of affairs has forced me to the front to ask of you whether you will place it in my power to renew the contract with Mr. Keely; or leave him under the control of men who seem to be oblivious of the interests of the stockholders of the company in their 'clamor' for an engine. When this system is completed, in its application to mechanics, the present mode of running engines with shafts and beltings will disappear, creating a revolution in all branches of industry.

"Looking at my request from another point of view, do you not think it due to extend to Mr. Keely an opportunity to prove all that one of your number is ready to announce as his conviction in regard to the claims of Mr. Keely?

"You all know to whom I refer — Professor Joseph Leidy. 'Oh, Leidy is a biologist,' said an English physicist not long since; 'get the opinion of a physicist for us'. If I did not wish for the opinion of physicists, I should not have appealed to you for help at this most critical juncture. But I also ask that no opinion be given by any physicist until Mr. Keely's theories are understood and demonstrated, by experiment, as he is able to do.

"Yes, Dr. Leidy is a biologist, and what better preparation could a man have than a study of the science of life to enable him to discern between laws of nature, as invented by physicists and nature's operations as demonstrated by Keely? [Page 29]

"The science of life has not been the only branch to which Dr. Leidy has given profound attention; it is his extensive and accurate knowledge of its methods, limits and tendencies, which prepared the way for that quick comprehension of possibilities, lying hidden from the sight of those men of science whose minds have rested (not rusted) in the grooves of mechanical physics. In Dr. Leidy we find entire scientific and intellectual liberty of thought, with that love of justice and truth which keeps its possessor from arrogance and intolerance, leading him with humility to 'prove all things and hold fast to truth'. To such men the world owes all that we have of advance since the days when science taught that the earth is flat, arguing that were it round the seas and oceans would fall off into space. In Dr. Leidy's name and in justice to him, I ask your sanction to, and approval of, my efforts to preserve Keely's discoveries for science — discoveries which explain, not only the causes of the planetary motions, but the source of the one eternal and universal force".

A correspondent in *Invention*, London, writes, December 12, 1891

We have at various times in these columns alluded to the investigations of the Philadelphia scientist, J. W. Keely, and this searcher — who is now stated to be engaged in finding a method whereby the power which he professes to have discovered can be employed as a motor in the place of steam — is just now the object of considerable attention in the press of the United States. To summarize the present state of the criticism to which this man is subjected, we may mention that for some time past *The New York Herald*, among other papers, has been printing a series of articles that have been recently prepared by an American inventor named Browne, professing to show how Keely has, for nearly twenty years, been deceiving expert engineers, shrewd men of the world, some few university professors and others, by the use of compressed air, obtaining testimonials of his discovery of an unknown force in nature. In reading his articles any one who has seen the photographs — as the writer has done — of the researching instruments discarded by Keely, in past years, and those that he is now employing in their place, cannot fail to detect the misstatements and misrepresentations made.

Mr. Browne (?) even overrides the testimony of the late Professor Leidy, Dr. Willcox, Dr. Koenig, Dr. Brinton — the Baltimore physicist — Dr. Tuttle, and the engineers Linville and Le Van, all of whom have tested the force used by Keely, and admitted that no electricity, no magnetism, no compressed air is used. Without indorsing in the slightest anything that Keely has discovered, or claims to have discovered, we think that, with the English love of fair play, both sides should always fairly be heard before either is condemned, and as Mr. Keely has consented to instruct a well-known English physicist in his method of

producing the force handled, there is every chance of the truth being known, and the correct state of [Page 30] the matter divulged to the scientific world at large, when, mayhap, this rival inventor may have to retract his assertions or stand a suit for libel. We do not say it will be so — we only assert it may be. Professor Brinton who has made a study of Keely's methods, writes this month to a friend in London: — "The exposé of Keely's alleged methods continues each week. Some of the proposed explanations are plausible, others are plainly absurd. They only serve to attract renewed attention to Keely. I have written to the editor to ask him to arrange a meeting for me with the writer, but I have not yet been able to discover the Mr. Browne, of Brooklyn, who is the suppositious author."

Mr. Keely has chosen the successor of Professor Tyndall, at the Royal Institution of Great Britain, as the only one to whom he is willing to communicate his method. This will be welcome news indeed to scientists on both sides of the Atlantic, and the result will be awaited with anxiety alike by both the friends and foes of Keely. We shall watch for the result, as will our American *confrères*. — Wm. Norman Brown.