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Nature's Invisible Forces

*The Seven Principles or Laws of
Nature Analyzed and Expounded*

SOURCE OF COSMIC ENERGY AND MATTER.

NATURE'S POTENTIALITIES—ILLUSTRATED

ASTRONOMICAL SCIENCE.

HOW A UNIVERSE IS CONSTRUCTED
AND MAINTAINED.

FROM ANIMAL TO THE SPIRITUAL MAN.

ART AND THE MORAL LAW.

FUNCTIONS OF THE HUMAN MIND.

UNIVERSAL CONSCIOUSNESS
AND KINDRED SUBJECTS.

BY

THOS. H. ELLIS, St. Louis, Mo., U. S. A.

1917

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By THOS. H. ELLIS

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PREFACE.

Having passed the mile stone of three score years we have patiently given close attention for over a half century to humanity's paramount questions: From whence did we come and whither are we drifting?

Each one of us is a child of Nature, a part of the grand whole, and in our normal condition must necessarily be in touch with the Universal to which we belong. So in a purely natural condition, stripped free from fear and prejudice, we are, of inherited right, mental units of Universal Mind.

With these undeniable truths as our guide in life we have but to cast aside erroneous ideas born of personal greed, supported by conniving art that clouds our mental vision, and place our personal instrumentality in harmony with the Infinite and our ability to understand is complete.

Every individual mind is a receiving center. Nature's Akasic record is open to all. Ignorance is the negative position. Prejudice is the bar. Facts only are the line of consistent contact, and Reason, unless poisoned by error, revolts at any other. Each individual can know the truth and the truth will make him free.

In the compilation of the contents of this volume we have not sought the opinions of Men, but whether or not, its conclusions conform to Nature.

We claim no superiority over others. In fact we know our weakness. What we are proud to be is a student of this boundless Universe, and our happiness is expressed to the degree we enjoy the mental companionship of our fellow creatures.

THE AUTHOR.



Yours Truly,
Thos. H. Ellis

INTRODUCTION.

The world is replete with books dealing on every conceivable subject, and were it not for the fact that there are numerous interesting questions which even the educated minds claim cannot be solved, I would not undertake to present this volume.

We have not copied after the works of other authors, but have used our endeavor to rend the veil of mystery that hangs between the minds of Men and Nature's Laws by a close observation of Nature and the Works of Nature, and feel that we have accomplished the work to a considerable degree and presented it in a manner that a child can enjoy and comprehend.

There are many problems that the world ought to know and many minds ready and eager to grasp them, but so far as the author knows solutions have not been presented; at any rate the scientific world and public press boldly claim that the contents of this work are still confined in the realm of the unknowable.

It will readily be seen that to copy after other books or express the opinions of other men would not solve the questions, nor would it in any manner enhance the knowledge already presented.

It is our purpose to present original ideas as well as lay the baseline for concrete thinking: by presenting

premises from gleanings of Nature from which can be drawn true and basic conclusions.

We shall attempt to introduce Nature's Laws by illustrating Nature's Invisible Forces. Not from theory, but by direct application of Mechanical Law, which will place us in actual mental touch with Nature as no other process can do.

It will dawn upon the reader, perhaps for the first time, that our universe as a whole, is practically invisible. That not one-millionth part is visible to physical eyes. That creation is only in the making and forever will be, and with increasing propensity.

The work will cover the four grand Physical Planes and in a measure reach into the prospective. It will make clear and in a concise way explain the Dual Process—the wake and sleep states of Nature. It will deal in an analytic way with the process of creation, making unmistakably clear the basic source of cosmic energy.

The work will cover a true account of well founded theories on Astronomical Science up to the present time, which will be supplemented by treating all doubtful questions in a manner supported by knowledge of the Laws of Motion, wherein will be set up, not a theory, but a new Astronomical System. One that shows, not that our solar system came into being and motion and is dying down; but that the force creating, is propelling and maintaining it.

It will explain why and how the Sun shines. Why stars maintain their place in space. Why planets revolve around their central Suns. Why they rotate upon their axes. What governs the speed of their revolution and rotation. How light is produced. What maintains the rings around Saturn and why the moons do not rotate.

It will illustrate the process of transposing Energy to Matter and Matter to Energy. The work will explain in unmistakable terms and illustrate the process of Nature in constructing to multiplicity and diversity—showing why no two things are alike in all the World. It will expound the dual involuting process of concentration of Energy into the seed of re-generating Life Lines of Heredity—or the Tree of Life. That everything in existence is a parasite and that there is a Soul within everything.

It will deal with the questions of the Survival of the Fittest, the gulf and tedious route and struggle of the pre-Adamic to the Spiritual Man. Including the one hundred or more functions of the Human Mind, Art and the Moral Law, and The Universal Consciousness.

We do not claim a complete solution of all possible knowledge, or that we can think for others. If, however, in our humble effort we can be instrumental in furnishing food for thought we will feel that this work is a success.

With that idea in view this volume is dedicated to my companion in Life, Margaret Adams Ellis and the Thinking World.

THOS. H. ELLIS.

CHAPTER I.

THE SEVEN PRINCIPLES OR LAWS OF NATURE ANALYZED AND EXPOUNDED.

In order to enable readers to fully comprehend the subjects embraced in this work, we ask them to bear with us the task of a sincere and careful analysis of the fundamental Principles of Nature, known as Nature's Laws.

There are seven notes to the octave in what are known as sound waves. There are seven colors produced by the waves of reflected light. There are also seven Immutable Fundamental Principles back of and embracing the great Cosmos—"Nature's Invisible Forces." For the want of better names we call them **TIME, SPACE, CONSUMINATION, AFFINITY, NUMERICS, EVOLUTION and COMPENSATION.**

We have arranged the Principles in the order of their relative importance. Not one of the Principles is in itself operative. There is not a single phenomena that ever takes place, not a manifestation, great or small, that is not brought about without the conjunction of the seven Principles—Nature's Laws.

Although it is by the conjunction of the seven Principles that manifestations take place, we can nevertheless discern and ascribe to each its particular function or agency in the specific as well as general cosmic process of establishing Keys, Planes, States of existence, Energy and Matter. The Agency is a combination; the final result, like unto its parental source, becomes a combination. We will now endeavor to determine each of the seven Principles separately, giving them in order

of their relative importance, briefly ascribing to each its particular agency or function.

TIME is an Immutable Law. A beginningless, endless and motionless Principle. Time is an ever present staff standing midst the eternal past on the one hand, and the eternal future on the other. It is Nature's immovable Cross. The Principle of Time determines the two states of existence: the active and rest, the wake and sleep. To every movement it gives the measure of duration and embraces within its bosom non-activity in silence and sleep. Time is a fixed track over which every thing must move and exist: to exist, to think, to act is to use a measure of Time. Time is the base of existence and in conjunction with the other Principles becomes and is the potent factor, the mother and protector of the endless and ceaseless multiple process in the establishment of Keys and Planes, Energy and Matter, as well as to the memory and record of its eternal progress. There never was a time when Time could have had a beginning, nor a time when there shall be no Time. It is Things that have beginning, and afterwards are maintained within Time. Time is distinctly a measure of action from the state of silence to the extreme of intensity; although present and omnipresent, extended to endless Space, it has no function in the measurement of Space.

SPACE is a geometrical Principle enveloping all things that are and all that are to be. It is a leverage of Energy, a measure of all movement and all form. Every point in Space is an infinitesimal center, fixed in the mother of Time, and every movement from that center is a movement leading outward toward endless Space: a movement toward diversity. SPACE like TIME, is present, omnipresent, motionless and fixed. You cannot

add to it or take from it. Being endless, to all intents and purposes every point is a center, and every thing has its center indelibly fixed in Time and Space. To exist is to consume Time and Space, to move is to pass over Time and through Space, to use the Principles is to manifest them. Time and Space are Principles co-jointly extant. They embrace every other Principle, Condition or Thing.

CONSUMINATION is the Principle of inherent agency, the Mill of Time that forever grinds. To exist is to consume Time, whether awake or asleep. To exist is to consume Space, though ever so small. To consume Time is to use its multiplicity in continuation. To consume Space is to use its limitless leverage. Consumination is the ceaseless process of chemical transformation: the one thing eternally eating the other and vice versa. It is the track leading to generation and re-generation of potential energy, giving rise to the function of activity between the wake and the sleep states. Consumination is the lever that crosses the fulcrum of the Keys of motion and the Planes in Space; always giving advantage power to the end consuming the greatest duration of Time, and the greatest extension over Space. It is the bridge over which flows the energy giving rise to Natures' perpetual motion and its survival of the fittest.

AFFINITY is a Principle of ceaseless effort to bring all things to a common center generally and like to like specifically. That which binds elements to planets we call gravity. The same Law applying from planet to planet we call Attraction. From mind to mind we call it love. It is the Principle that holds planets in their orbits by balancing the centripetal and centrifugal forces. Affinity is Nature's Mother Love whether it be

in binding Star to Star, Sun to Planets or Soul to Soul. The Principle itself is prior to and back of all Things. Each and every particle of matter, according to the Plane it belongs, is encompassed with the Law of Affinity and contributes its portion in making up the grand total of what is known as the Law of Gravity. Affinity has a Dual expression; while it attracts like to like it also has a repellent force, in the sense that elements of a finer Plane are less and less attracted to the grosser until they have the appearance of being repelled entirely. This, however, is due to the fact that the finer and rarer matter becomes, the less the force of the Law appears until finally it is lost within diversity and the Principle itself. Principles are known only as they manifest through matter, and while its agency is easier traced in the Law of Affinity it is nevertheless true with all the Principles. This feature of a lesser and lesser attraction of Gravity will be fully explained under Chapter X, "The Law of Heredity."

NUMERICS is a Principle that is universally expressed within every thing. It is present and omnipresent: not a motion, expression or environment ever escapes or can escape its indelible register. Every thing that ever came into existence, that now exists or ever will exist, is and must come under the agency of this Immutable Principle. Every one and every thing is numbered. Every impulse, thought or act is likewise embraced within the annals of this Law. Numerics is the agency that establishes Keys to motion, Character to things, and a memory and Soul within every Thing.

EVOLUTION is the Principle of gradual development. Its function is to condense potent energy from Space toward a common center, and from that center to grad-

ually evolve outward to that of a higher and higher Plane. It is a vibratory Process, ever pouring energy into a common center and evolving energy and matter out. It is not confined to planets and heavenly bodies alone, but is also the principle agency operating through all animated forms. It constantly builds up forms, and re-converts them to their original source; at the same time continues to convert potent energy to its specific centers, a re-vibration, a re-generation. Each time the process is repeated it finds a higher expression, and this higher expression when again condensed to its original centers, carries this greater development, intensifying it at the point of re-generation with a greater potentiality. The Principle itself does not move: it is a fixed track over which energy constantly vibrates to and from the wake and sleep states. Evolution is the track over which energy plays, and as no movement can escape the Numerical Law, it is therefore numbered, registered, characterized and materialized. It is characters that are evolved, take on forms in units of higher and higher expression, an environment fulcrum that again confines its added development to its specific centers, intensified with all its potentiality, there again to repeat the method of eternal progress. We note that Matter generated over the track of Evolution, becomes like unto its creator, a more or less fixity, having no other place to go it remains in the rest state, a basic center from which energy constantly plays to and fro. Out from this basic center, higher and higher Planes evolve, from which the evolutionary tracks are to be found—a compound over the Plane beneath it. Evolution is not only the Principle of condensing energy and building and re-building forms in a higher and higher expression, but is con-

stantly building an environment upon which a higher environment is created. It is the constructing of the to-day upon yesterday, as it will the to-morrow upon the to-day. Every point in endless Space is a center; every present moment is the center of eternity with our Universe always in the making.

COMPENSATION is the Law of Adjustment. It is the Principle over which an equilibrium is established within and between all things, more particularly noticeable in the operations of the Moral Law. It is the Law that contributes a sense of satisfaction for energy expressed, commensurate with the effort made and the resistance overcome. Compensation is a Law closely allied with the Principle of Justice in the Moral Law, with this difference: Justice is a dictum of the Mental World, while that of Adjustment is a Principle of Nature. Justice is relative; while Adjustment is the expression of the Law of Compensation and belongs in the Absolute. The Law of Compensation finds its equilibrium to the most minute detail, just as the pendulum finds its center, and there it stamps its dictum, and from the Absolute there is no appeal. Justice has its functions within the Consciousness of Man, and as man is constantly advancing, it is possible to see Justice finally reach the Absolute.

If it were not for the Law of Compensation this would be a dreary existence indeed, for if effort is not to be compensated, what should be inducive to produce the effort? If no effort be made, no advance is to be attained. Thus it is that the Law of Compensation is the agency of Hope, and Hope the motive of Effort, and Effort the cause of Attainment.

If one is to find a true analysis of Nature's Laws he

must constantly keep in mind the dividing line between Nature's Laws and the Moral Laws. Nature's Laws are basic Principles within the Infinite and Absolute. The question of Good, Evil, Right or Wrong, does not enter in. Their function is from the Cosmic Infallible to ultimate ends. The Moral Laws are the expression of Consciousness, and Consciousness is a function of contact that is traceable through matter everywhere, which advances, step by step, until it reaches the independent states of arbitrary directivity, like the flower that grows out of the stem and afterward produces the perfume—The Moral Law is the Perfume of arbitrary consciousness that stands, rises or falls with the source of its birth. It is therefore incumbent in the study of Nature's Laws that you free your mind with all its virtues for the time being, from any thought of the Moral Laws. You will then be enabled to get a clear Mental vision of Nature, pure and simple, from within and from without, and not have your vision biased by the coloring of the relative sense of the mental world.

We have endeavored to analyze the Principles of Nature in an understandable way, and at the same time make the matter interesting enough to hold the attention of the reader. We have also found it difficult to find words enabling us to convey our thoughts in clear and concise meaning. But difficult as it is we must first get the fundamentals into our conception as a base line, for in order to arrive at true conclusions we must first start at true and basic premises. And from these premises we hope to show how "Nature's Invisible Forces"—Nature's Laws, collectively—become creative factors in the topic of our next chapter, "The Source of Cosmic Energy."

CHAPTER II.

SOURCE OF COSMIC ENERGY.

In the first chapter we dwelt upon the Principles of Nature specifically, that the reader might get in mind the function or agency that each Principle separately plays in the cosmic process. In this chapter we will endeavor to expound the part played by each Principle in their co-joint agency in bringing into existence the extensive manifestations we behold. Not only what has been established, but what is still being established, projected and maintained.

It will be readily seen that we can trace results back to their primary causes. But when we reach the Principles giving rise to these primary causes we are able to discern a distinct differentiation in their respective agencies. While to undertake to fathom a cause back of Fundamental Principles, to say the least, is unthinkable. In other words we can trace matter in all its forms back to energy, because matter is a tangible substance, and in that substance is embraced the character and record of its creation. In fact matter is expended Energy, that, when conditions demand, may be and at times is converted back to Energy again. There is this difference: Energy is a potential force in the state of action, while matter is expended Energy in the state of rest. Matter becomes a base and fulcrum where Energy expressed gives greater results, and while Matter and Energy are both embraced by the Laws and Principles back of them, we note the fact that Energy is

prior to Matter, a finer composition and more susceptible to the influence of the leverage and evolutionary Principles or Nature's Laws. Beyond this point we cannot go even in thought; still we are able to apply the Principles with abstract and unerring results.

Principles are present and omnipresent fixities, and therefore changeless and immovable. Being everywhere and extant, outside of themselves they could not be. Not only is this true, since nothing can take place outside of the Principles, or after coming into being escape the Law's embrace, it follows that Principles are not only the primary source of Energy, but are the fixed tracks over which Energy must travel, and all things are projected, extended and maintained.

Within the grasp of the Principles, or Laws of Nature, is an endless sea of rarified matter. Perhaps to call it ether or electrical energy would convey a better understanding of what is meant. It is through the action of this substance that the Laws find expression in establishing Keys, Planes and States of existence, and from the result of these fulcrums elements, forms and combinations are condensed and builded. But we must assume that the Keys, Planes, Etc., are within the Laws and no part of the force or substance that go into building the constructed forms, but is the determining agency that give rise to the results that follow. In other words conditions and Energy go hand in hand and results in a specific manifestation following the line of their directing force. Within this sea of potent Energy or rarified matter, is to be found actual invisible lines in countless numbers and diverse directions, or else all the rarified substance is a track over which sight lines, lines of attraction, lines over which Energy travels, the light

energy from the Sun and that of the distant Stars reach us, as well as having the quality of being a boundless ocean of Life and a home where Suns, Stars and Planets float, exist, grow and have their being.

We must conclude that as far out as Stars and Planets exist, the Principle we call Space, is teaming with Life, Energy or virgin matter, and to this conclusion there can be no question. Beyond this there is still the Principle with its endless possibilities. That this Life or Virgin Matter is a direct inheritance of the Principles that precede and encompass all things, as it now takes in all the heavenly bodies; we may conclude that forms have their beginning, and out of this substance are condensed solidified bodies. The solid condensed bodies do not come in direct contact with the Principles but are linked up by graduated Planes, and from the Planes back step by step to the primary cause, just in the manner that mind is enabled to move matter; which is not direct but by an intermedium step process.

We cannot avoid the conclusion that in all past time, Principles have been operative in compounding leverage and multiple energy; so there has been no lack of time in which to have filled endless Space with a boundless ocean of Life, potential, or whatever you choose to call it, that when expending its force goes into the rest state in condensed matter. But the thought of endless Space staggers the mind. So let us modify it by assuming that eternity is a fixity, and that it is events that come into being and move. Time is known only by movements and events. Events and things evolve out of the Absolute, that from which thought itself is barred, while that which has appeared, comes into the relative and is measured by relative conditions. We know that things

do come into materiality, and having come, have a time of their beginning and a center to which their forms are builded. In other words, Energy involves to a center as its force is spent. At first the center is an infinitesimal point within the Absolute, which grows to materiality and becomes a relative manifestation. To some, this would be the beginning of creation, whereas it is the expended Energy passing into the sleep state.

Let us take into consideration what is meant by Cosmic Energy. In order to do so we have to note the fact that no Thing exists without a cause preceding it. While the primary cause is bound to be a Principle, and that a Principle is not a Thing. Principles produce agencies or factors and factors express Energy, while Energy expends its force in motion, record and character.

There are two kinds of Energy which is expressed under the following terms: Efficient and Afferent, Electric and Magnetic, or Masculine and Feminine. It is a case of moving outward or moving inward, a pendulumatic or vibratory movement. To expand is to move outward, taking in more Space. To condense is to shrink, taking in less Space. Masculine or Efferent Energy therefore presses outward and expends its Energy to a condition of diversity. When Masculine force is expended it falls back unto the Feminine, bringing into its center its diversified expression into a condensed form—essense of diversity. Each time the vibration takes place it may be said to have re-generated, and each swing of the pendulum has the advantage of increased development. There is a middle ground between the unit of full expression and its center, just as there is a middle point of the swing of a pendulum. That

middle ground is the plane of equilibrium; a balance between the Masculine and the Feminine. Units already in existence do not dissolve into potential centers; but instead unite forces that do concentrate to come back a new unit of the duality expressed. The Energy thus used is always the surplus Energy.

Condensed forms are but an exceedingly small part of Space; so small are the planets compared to that of Space around them that the mighty Suns are but tiny specks in the sky. In the case of our own Sun it has taken the surrounding potential forces inscribing a scope of over six billions of miles in diameter to condense its central Sun and Planets. All this Space is occupied by Energy and but a small part occupied by solid matter. It is therefore safe to conclude that solid matter is as short of being in rapport with the cosmic Principles as they are short of occupying the Space that was necessary to condense them. While on the other hand the Energy surrounding the planets fills all the Space. We can trace matter back to Energy, because matter is always encompassed and maintained by Energy and carries within a record of its' past conditions. We can likewise trace Energy back to Principles by their functions and agencies; here the analysis must cease, for the reason that while matter is tangible, Energy is less expressive, and from that we arrive at agencies acting under fixed and unlimited Principles. When we get this line of the action of the creative forces in our minds the mystery of the Universe fades away, for to understand the Laws, the facts determine that it could not be otherwise.

Energy expressed in motion finds its environment as it crosses Space and Time, while the Principle of Nu-

merics establishes its record and key. For illustration, sixteen vibrations within one second of Time, gives the record and Note of "C." If it should be just double that number it would still remain the Note of "C," but one octave higher. If it should be any other number given within the same measure of time it would produce another record, another Note. If the motion should be rotary instead of vibratory, traveling over a given measure of Space within a given measure of Time instead of the establishment of a Note there would be a Plane. The Plane would be an equilibrium of motion over Time and over Space, according to the fineness of the Energy expressed and that can be anywhere, between the Absolute silence, and that of the speed of light, which is over 186,000 miles per second. A straight line movement must come to a stop when the Energy is expended, then return on the line it came; and when this movement is taking place, the time of pause is equal to the time of travel, because it becomes a perfect balance with the resistance it must overcome. Thus we have the equilibrium of the dual process, the record and key. In the case of a rotary motion, the fineness of the substance revolving determines the degree of resistance, and an equilibrium is the dual process between a silent center and its revolving circumference. In the case of rotary motion, the Law of Affinity in attraction and repulsion expresses its agency, by giving to each Plane its specific attraction as well as its own specific momentum or repellent force, together with a general expression over the whole. While in the case of the motion of vibration momentum must break off at each pause, and the Law of Numerics expresses the greater function or agency. Keys and Planes are to a degree states of exist-

ence, or in other words conditions. They are like rings within rings, waves within waves, vibrations within vibrations, tones and semi-tones. This is not a condition that confines itself alone to matter, but it is the agency that places worlds within worlds; beginning within the lower stratum it is never lost sight of as it penetrates deeply into the highest mental spheres.

Energy, although ever so potent, in itself cannot manifest without a fulcrum or base of resistance. The base of resistance may be a Key, a Plane, or inertia embraced in matter. At any rate Energy expressed in motion over a given resistance, which implies the crossing of a certain amount of Space within a given measure of Time, determines the net result under the Law of Compensation. The greater the resistance that Energy overcomes, the greater the record made, the greater is the measure of Compensation. If upon the other hand Energy moves and all things move along with it, to all intents and purposes there would be no movement, no record, no Compensation. The clock, if a perfect time keeper, must move in perfect unison with the movement of the planet it happens to be on; not Time, for Time does not move. If Time moved then the clock would not have to move. The fact is the clock does not measure Time but the movement of the planet in its rotation on its axis as the planet revolves through Space. If the planet did not move, or Space should move along with the planet, the clock would not need to move as there would be no movement to measure, all would be eternal monotony, silent sameness. Happily this is not the case, for all Things move, although they manifest a state of rest or sleep within themselves. A thing in the

rest state means silence in relation to its own center, but in motion as relative to other Things.

There is no difficulty to trace the source of the dual process in all manifestations, because every Principle has its Dual function. But in the establishment of Keys and Planes it becomes more than a function, it is more than a function, it is more than a factor, it is actually a fulcrum. It is by virtue of this fact that Nature gives to every manifestation its gradual step progress. The tuning fork illustrates the established key in vibratory motion, and the gyroscope proves beyond question how firmly the rotating Planes resist being diverted from their regularly established position of motion. Matter does not however remain in the one and same plane, for all elements of matter have their own centers toward which energy expends itself, and sooner or later are attracted to a more condensed Plane to that of a more general center, as is the case of the working out of the idea generally accepted by the scientific world, relative to the nebulous hypothesis of the construction of planets. The difference between the nebulous theory and the one outlined above is that the nebulous process ceases when the planet is formed and becomes a molten mass; while the process herein outlined is a never ceasing—a perpetual process. The process, while not sudden, is gradual until all is spent in the sleep state. All the process finally condenses to a grand center where Energy is finally transposed to heat by the force of intensification. Then the heat which is but another form of Energy finally spends itself, becoming crystallized or solidified matter. In the solidified matter we are not lost to the riddle of uncertainty, for every rock has a perfect indelible record of itself, the elements of its own particu-

lar construction and character; and if there be any shortcoming it is not within the rock, but with us, in not being able to read its soul—the memory of its past.

The Universe is a musical instrument, eternally playing, part of which is a statue, music of the past in the frozen state of memory, and part is in action: the eye can catch one octave, the ear can catch eight octaves; and to him who has developed his mental powers, has the symphony of the spheres.

Every Plane has its circumference as well as its center toward which it gravitates. Each Plane is in itself an octave, which divides itself not alone by Space but by condition and relative fineness. The coarser Planes always being allied nearest to the common center with all the finer Planes interpenetrating each the other, with the finest extending the farthest and occupying the greater latitude until it finally becomes a general field reaching toward that of endless Space. In the vibratory motion, where octaves are established, we note that each octave in the scale above, doubles up by two or divides into two where it was but one before, which like the Planes extending outward taking in more Space, the note of vibration becomes finer as in each octave it rises, and in a like measure finds less and less resistance in its capacity to traverse Space, as is observed in the use of wireless telegraphy. The key or plane of fineness in the texture of visible or invisible matter differs in degree to the extent that there is a possibility of worlds being within worlds, without one in any way interfering with the other, as we shall try to show in our work later on. At this time we call your attention to one fact only, and that is the readiness with which steel will permit a current of electricity to pass through it.

It is necessary to repeat at times in the handling of these subjects concerning Nature's Laws, because they so interwind, one with the other, that the explanation of the one, repeats that of another. However the repetition will not injure, but rather add virtue in impressing the conviction clearer and deeper into the mind. If you enjoy the subject, it is because you are in harmony with the matter in which it treats. If it is tedious to you, it is because you are not mentally in tune with the Laws of which the subject is embraced. Let us examine the production of music and note the part the Laws play in this wonderful phenomena. First Energy must be expressed in vibratory motion. In order to be motion it must move over Space. The motion must consume a measure of Time. To consume Time and Space is to use the Law of Consumination. And as no expression can escape the Law of Numerics, the motion over Time and Space registers its notes according to the number of vibrations consumed within a given measure of Time consumed; thus sixteen vibrations to one second of Time records the Note of "C." If it be any other number it would register some other note; therefore in order to produce the tones required you have to keep within the fixed Laws. The Principles are there and up to this point are followed, but we are still short of the manifestation. Energy must be expressed over resistance which in expending its force rolls outward under the Law of Evolution; while the volume is maintained under the Law of Affinity, either harmonious or discordant as the case might be, with the result that our ears receive under the Law of Compensation. The air as a resistant and conveyor, with the ear as a receiver makes the manifestation complete, under the expression of the Laws. The

Laws as applied in music is the same as that applied to any and all concrete forms, for the reason that no Thing can exist without consuming Space, though it be ever so small. To consume Space is also to consume Time either awake or asleep. To have form is to have expressed the Law of Consumination and to be maintained by the Law of Affinity and registered by the Law of Numerics, which is to be keyed, planed, characterized and materialized. Once a Thing is in existence it will forever progress under the Law of Evolution, and profit by the Law of Compensation.

Principles are not Things, and in their very nature are measureless, beginningless and endless. They are immovable fixities, imponderable in extent, and beyond the imagination of the mind to follow. Being fixities they are changeless and immutable. They are a primary source of all Energy, and as such are beyond the reach of any power to change or annul. Every Principle has its dual function that projects its effect into every manifestation. It is this dual function that contributes to the two states or conditions of existence, known as the efferent and afferent, the positive and negative, the electric and magnetic, the masculine and feminine, the active and the rest, the wake and the sleep states of Nature.

Principles are co-jointly operative; as such they are the fountain of all coherent potential Energy. This Energy like its parental source, extends throughout endless Space, a mass, a limitless sea of life. Here in this virgin soil, the mills of Time and Eternity ARE constantly grinding out the Universe we behold. Our reason says there never has been a time, there never can be a time when Nature will cease to work. Our Uni-

verse will always be in the making with an ever and ever increasing rapidity. Every Thing, like its parental source, inherits Eternity and finds its abiding place, some how, some where in this endless deep, there to forever play between the active and rest, the wake and the sleep, and forever and eternally advance toward the ultimate.

Every Thing has its beginning in an infinitesimal center. Slow and tedious must have been the primordial movement of potential Energy, in its process of condensing Energy into that of baser matter, before the time when there was environment to offer resistance that should be contributive to the breaking down of Energy. But when environment was once established the process would naturally increase its progress. We need not disturb our minds further in this field, for all past Eternity was there to accomplish the work.

There is a bridge between Energy and Matter that is invariably used. That bridge is heat, which expresses in result according to Energy applied, resistance met and Time consumed. If it be a great resistance and confined to a short Time, the heat will be intense; if it be a lesser resistance or a longer period of Time consumed, the heat will in like ratio be reduced or extended. Not because there is a less quantity of heat, but because it is extended in keeping with the greater or lesser Time used. Energy crossing the bridge of heat does not become all expended, but only a small portion becomes transposed to matter. When there is an effort made to break up matter and it is thereby again transposed to Energy, it is not all transposed, for the reason, like that of the reverse effort, it has its pro ratio of resistance retaining it to its then present state of existence, never-

theless it has the same bridge of heat to cross. In other words all solidified matter becomes so through the process of fire. And in the breaking down of the same matter there is the same expression of heat, because heat is the expression of the Law of Consumination, in its consuming of matter to cross the bar of the Numerical Law to that of Energy, or in the consuming of Energy and forcing it across the Numerical bar again to that of matter.

Under Chapter III on "Nature's Potentialities," we present a symbol representing Nature's Laws in monogram. But before we undertake to explain the symbol we wish to convey the idea that Nature's Laws do not work by design, plan, or purpose, but by process. Therefore we never use the words, plan or purpose, for the reason that it would necessitate the use of an arbitrary directive force above that of the Laws and Principles, and this arbitrary function we confess we cannot find. With this explanation we will proceed to detail the monogram: Time is the staff of Eternity, represented in the upper left-hand segment. It is also the multiple process of Cosmic Energy. Space is the trinity of Nature and every part of Space is a center and each center is the center of the Universe. From every center is a dual triune line pointing to every general direction into endless Space. It is placed in the lower left-hand segment of the monogram with the Law of Consumination operating between Time and Space as a consuming fire, forever transposing Time and Space into multiple and leverage potential Energy. Then to send the Energy across the Numerical bar, giving to each agency, function, motion or thing a record, character and materialization. At this point of Nature's manifestation the Law

of Affinity finds an abiding place grasping each molecule of spent Energy with a ceaseless hold, and in a like measure by the result of the bar of Numerics which the molecule passes over, is added the expression of continual extension, and with each added molecule is added the further expression of the Law of Affinity. Having reached the constructive stage of molecules and elements, the Law of Evolution comes into the process of manifestation, and a process of a compound continuation of evolving outward goes on. In which case the Law of Evolution constantly constructs the present upon the past, by the results attained over the bar of Numerics, Consumination, Time and Space. For the reason that Evolution is the culmination resulting from the work of all the Principles before expressed, and from that toward an ultimate, there to attain a final registry under the Law of Compensation, commensurate with Energy expressed and resistance overcome.

Affinity plays the most important part in the process of extending potential Energy. Each molecule, element or grain of sand has its pro ratio of Affinity expression, with each molecule, element or grain added in the construction of a body is therefore in a like measure added Energy. In order to illustrate we will presume that you are holding a bucket of sand that is constantly pulling to get to the Earth; we note that each grain does its part in the pulling, so we let loose one grain at a time, and as each grain becomes released from the bucket it becomes lighter and lighter until all is released and the gravity itself has lost its effect. That which applies in the case of a bucket of sand also applies to the whole planet itself. So that the showers of meteors that are constantly falling into our atmosphere, which

are nothing but ether vortices, become condensed through atmospheric friction and thereby transposed to matter, fall to the Earth in cinders or dust, which constantly add to the body of the planet and in like measure extend its force of gravity. As the gravity increases, its planetary attraction (which is the same thing) reaches farther into Space and thereby extends its influence toward a greater and greater supply of suspending Energy. Thus when a planet becomes a center of attraction it automatically continues with increasing capacity.

There are other sources of Energy that will come plainly to view, among which are the following: A circle is three times greater than its diameter, in which case the Energy being expressed equally the circumference has three to one advantage over the center. A circle when in vibratory balance with its center is a plane or equilibrium with all outer Space as surplus leverage. A man gets on the scales to be weighed, he immediately moves the sliding weight out on the beam until it comes to a balance, which registers his weight, that is enough Space to lift him, any further Space is surplus Energy. A constant pressure equivalent to move a one-pound weight one foot per second, if given sixty seconds would move the same resistance sixty feet. If the same process be applied and the Energy be confined in storage with continuous application, in time it would accumulate force enough to move a mountain. In the case of art the process is limited; but with Nature it has no limit.

When once a thing comes into expression it cannot again escape the Law's embrace. To undertake to force a thing out of existence it would need to be forced back through the door it had entered, that of the infinitesimal

center—the absolute. This is one thing to which the scientific world all agree. Even Energy as fine as it is, in passing toward a center has always to take the winding process, for the reason that its movement is opposed from the opposite sides and confining center. But in going outward it is invited to diversity in Space. In other words construction requires less effort to accomplish than that of destruction. Nature has its accidents and failures in abundance. But construction having Space as a welcome receiver, builds all things from centers toward diversity of Space, and by the same process becomes a multifarious crop. Nature can afford to waste ten out of a hundred and yet succeed with its ninety per cent increase that the agency of Space contributes. Aside from this it has the multiple function that Time affords in its re-generating efforts of one generation lapping over many. Herein lies the reason that mankind can eat ninety grains of wheat and still keep up the supply by re-planting ten grains. If construction had no advantage over destruction, Nature could not afford a process or Consumation or accidents without suffering extinction.

Many bright minds have concluded that anything that has a beginning must in like manner have an ending, for the reason that they could not conceive of a stick having but one end. That would be good logic were it so that things had an abrupt beginning; but this is never the case. Every Thing begins in infinitesimal centers and ends in Space. If Space is endless, where does the Thing that is constructed in it end? In the case of a type line expression, it, too, has its beginning in infinitesimal unit centers that project their Energy in dual re-generation to new centers in an end-

less and multiple line of inheritance. Inheritance is an unbroken line of continuity with each generation—a masculine and a feminine Energy focus. Each focus has its own center; each center is a link or junction of continuity of character: the fruit of a line of infinitesimal beginning with endless continuity.

Everything that takes on form does so by virtue of and in conformity with the encompassing Laws. Space, if it can be said to have a form, is a trinity. Every point of Space is a center from which there are three interpenetrating lines. Each line crossing each other at right angles, thereby pointing to six general ways in Space. In Space we have three dimensions: first, second and third. A line is the first dimension, two lines are the second dimension, and three lines are the third dimension. The first represents length; the second represents length and width; the third represents length, width and thickness. As forms take place they must conform to the surrounding condition and occupy Space, at the same time yield to the element of environment. All condensation of spent Energy or the work of reconstruction of matter must pass over the bridge of heat in a greater or lesser degree. Vapor by being chilled will unite into globular forms under rotary influence as it falls to the Earth. A lower temperature, slightly below that of the water freezing point, will freeze the vapor before it unites into drops. The frozen particles of vapor become attracted to each other and as the formation does not readily submit to rotary motion, it unites under the law of the dimensions of Space, taking in every conceivable character and variety, but universally builds to the third dimension. Three right angle lines penetrating a common center, makes it have six sides or

six points. If the substance be of the mineral or vegetable kingdom instead of the liquid, it would require a greater degree of heat to condense, besides in its formation there would be a different environment, which would prevent its formation as frozen vapor free to act under the third dimension and force it to the next position, that of the second; as is the case with sugar in the vegetable kingdom, or the granite rock of the mineral kingdom, which always forms in the second dimension series of flat length-and-width layers. In order to illustrate the action of this phase of the Law as it has relation to the dimensions, we provide a drawing representing the three way angle of Space, which regardless of the limitless diversity of patterns, Nature uses in forming the snow flake. We have never observed a single instance where a departure has been made from the first, second and third dimensions of Space.

Just as we have finished the article on the formation of the snow flake our attention was called to an article in the *St. Louis Post-Dispatch*, copied from the *Cleveland Plain Dealer*, entitled the "Hexagon." The article states:

"Snow crystals obey an immutable law of six; they are six-sided jewels or six-pointed stars. They never answer to the law of four or five. Snow is crystalized water, and water always crystalizes in six-sided forms. Why? No one knows; no one ever will know. There is no more apparent reason for the six-sidedness of crystalized water than there is for the monoclinic prisms of sugar crystals. Water and sugar and the complex minerals which make the granite rocks all follow laws which are utterly unchangeable, but which are, as far as we can see, without any special reason."

It is gratifying to us that the leading press of the country makes this bold statement. It is all the more reason that the world needs to know, and why our work should go out to the world. What the noted editor sees as six-sidedness is the ends of three lines crossing a center at right angles. There is no other number to be found in the snow flake than that which is expressed in the dimensions of Space. First we have a line; a front spear: the first dimension. Next, but not always, a fiat surface; the prism; the second dimension. Then comes the third dimension, which is three lines joining at a center, or three lines crossing a center. Sometimes the formation twins, gives us six and in doubling again we get twelve and no other number. The reason that it never conforms to four or five, as the editor finds, is because it, like Space, belongs to the architecture of three, the third dimension. Snow flakes form out in Space, and the Law of Space governs their formation.

The Universe is a great stupendous self mechanism. The world Universe expresses all that there is, known and unknown. Man has been slow to look into the Universe as a whole, and most of us are content with examining the dense visible side only. This, however, is an exceedingly small portion of the whole. But we are going to extend our views, so we may as well start now. Matter cannot be produced without expending Energy. Matter will not move without Energy is applied from within or from without. Energy is limited by capacity and Space only. Small as matter is, compared to that endless sea of Energy everywhere around and about us, we can only know its magnitude as it effects matter. So we will take into consideration a few things Energy effects just as a starter. The constant

Energy stream flowing out from the Sun, at our Earth's orbit which is ninety-three millions of miles out from the Sun, takes in circumscribed territory in Space of eighty-one quadrillions of miles and expresses one horsepower for every foot of that space, every twenty-four hours, while its reverse influx action creates at the Earth's orbit a constant pressure of one hundred pounds to the square inch as its negative force. The gravity of the Earth constantly pulls on our atmosphere to the extent of one ton to the square foot. This is but a beginning of the subject matter in question. If we follow them we shall soon get beyond the mind's capacity to calculate. To speak therefore of Nature, or the Universe, and omit to mention Nature's Invisible Forces and their unlimited extent in vastness and immensity is like a title to a subject with the subject left out.

Energy in order to become suspended to matter goes under its proportion of waste. That is to say it must condense across a center, and in doing so not all of Energy becomes Matter, for the greater part remains Energy still. The same is true when matter is broken down and transposed to Energy, regardless what the process used, there is always a larger element left remaining within the matter plane. For instance in the consuming of fuel by combustion a large portion goes to ash and a much larger portion goes to the gaseous and ether planes. There is a bridge between Energy and Matter and vice versa; that bridge is heat. When Energy expends into Matter it crosses the bridge of fire. When Matter is broken down it crosses the bridge of fire. If the act be sudden, the heat will be intense, if prolonged the heat will be in a like measure

thinned out to relative mildness, giving the appearance of having no heat.

If you would know how Space contributes to Energy you have the answer in the fact that a circumference is greater than its center: it is farther around a body than it is across its diameter. And as a like expression upon a large body exceeds the same expression on a smaller body the circumference exceeds the diameter, which gives the multiple leverage advantage to the forces from the without to the intensification of the construction within. It is because of this fact that in all condensation of Energy in the construction of forms that Energy always takes the winding process, which is always three times the distance that a straight line to the center would be and with which it contributes three times the leverage force, and the multiple advantage of consuming three times the measure of Time that the straight line to the center would require. For illustration, let us assume that one pound pressure be applied for a space of one foot, for one second of Time. This would be called one pound foot. If the same pressure be applied traveling at same speed around the circle which would be three feet, it would require three seconds of Time instead of one second and the result would be three pound feet, instead of one pound foot. In other words, circular action toward a center has three times the advantage that operating over a straight line would have. In the case of artificial means or personal application there would be no advantage, for the reason that artificial means would have to accumulate its Energy. But in the case of Nature, it works from limitless Principles. Time has no limits, Space has no limits; hence leverage and multiple Energy have no time of ending.

In other words artificial means become exhausted. Nature never can exhaust.

There is still another very important source of Energy that constantly plays to and fro in the Law of Affinity. Everything is attracted to a common center; but some substances more than others, and as most every substance is transposable from one plane to that of another under the Law of Consumination, and again re-consumed or re-transposed, which means transposing from one plane to that of another, and again re-converting, which fact means that in one plane the same element takes up a lesser Space than in the one from which it was transposed. We see this in the process of the condensation of vapor into water, when it becomes subject to specific gravity and falls to the earth to evaporate, then to suddenly arise miles high in the air. Sap is forced up a tree, loaded with oxygen through the exceedingly fine tubes within the wood by levity until it reaches the leaves where the oxygen is thrown out and carbon from the air taken on to which it again becomes subject to specific gravity to stream down the bark of the tree depositing its character into the construction of the carboniferous wood. What is true with water is true with other substances. Four cubic inches of iron weighs one pound and will drop to the earth at the rate of sixteen feet per first second; but when pulverized the same iron will float in the atmosphere. Everything is subject to general gravity at all times. But when transposed from a grosser plane to that of a finer plane it looses its former specific gravity to take on that of general gravity, which is levity to the former. We are indebted to this process of Nature in the propagation of all vegetable and animal life.

Throughout Nature everywhere is a ceaseless process of building up and tearing down of forms. It is the Law of Consumination—the Mills of Eternity ever grinding on. It is construction; not destruction, always from a lower to that of a higher formation.

All forms grow from within toward the without. Energy flows from the without toward the within—the mother state of silence and darkness—and from the within develops outward. Not only does formation take place from the within, but the character is established from the within and develops outward, including the effects that environment plays upon same; so that each form has within it the capacity of developing a greater and greater formation. All animated forms take this course in their individual growth. The tree sends out its buds and leaves from within and sheds them off from without, even to the shedding of its bark. Animals shed their hair to send out a new growth. The birds shed their feathers as a new plumage comes forth. The larva leaves its wiggletail to become a mosquito. The tadpole sheds its tail to become a frog. The caterpillar sheds its grub to become a butterfly. We shall shed our mortal coil to become the Immortal Man.

Just to exist, Nature's Laws will keep you, either in the wake or the sleep state. While in the sleep state little or no energy is required. If in the wake state, we must move. In order to move we must consume an Energy from without, that we might express a motion from within. In other words we take on Afferent force and transpose it to Efferent force. To exist we consume Space, though we be ever so small. Whether we move or not we must consume Time. And were it not for the Law of Consumination we could consume neither Time

nor Space. To be we are numbered by the Law of Numerics, even to every act and thought. A movement without resistance counts for nothing, but a movement over resistance registers construction and compensation, which eternally builds from the within.

Afferent Energy is an exhausting force aiming to pass to a state of rest. This is the most natural thing it could do. Any Energy falling into a center always takes the winding course as that of the least resistance. At first there would be but an attenuated vacuum, but the vortex once started soon constructs a nuclei; and no sooner than a nuclei is established, it becomes embraced by the Law of Affinity which adds its force of gravity to encourage the vortex influx and increases that force as fast as the nuclei or core is builded. The Principle of Affinity as a matter of fact, exists prior to the building of even the first nuclei. It is because of the Law of Affinity that expended Energy falls toward a center, and it is by virtue of the Law that the nuclei when once started becomes continuous and self perpetual. There is still another and very pertinent reason that suspending Energy is drawn to a center. That is: because of the fact that anything in motion occupies more Space than a thing in the state of rest. When the motion ceases, let it be vibratory or rotary, in coming to a state of rest, must shrink from the larger field of action to the lesser field of silence, which, by the way, is attenuated vacuum. A good illustration will be found in the vibrating strings of a musical instrument or the vibrating thread of an incandescent lamp, where you can notice that the thread while the electrical current plays over its carbon resistance, occupies about sixteen times as much space as it does when in the state of inactivity.

Nature's basic forces are fixed and unchangeable. That is to say they are not arbitrary or in any way subject to caprice. In other words Nature's Laws are mechanical: they are not subject to scheme, plan, design or purpose. They work by process with ninety per cent constructive advantage, hence have Evolving continuity and Eternal Progress. Men copy after the Laws of Nature in the works of art. Mechanical devices are made perfect when they are made to conform to Nature's Laws. We build our machines to either utilize the Efferent or Afferent forces, generally the Efferent forces. When the machines are completed they are tested by Nature's Laws. Every mechanic knows this to be true, yet there are but few of them who take the trouble to think it out in reality. Machines are constructed to consume and transpose Energy. To be a machine it must exist in Time and be able to move in Space, carrying Energy over a given resistance, over a given Space for a given Time. The number of surface feet that the machine moves over a resistance and the number of minutes it is made to maintain the movement gives its capacity and is fixed by the Numerical Law. The results attained over the environment resistance, is the respective power as an expression of the Law of Compensation. The machine in its intricate parts is a construction of Evolution while it is maintained in combination by the Law of Affinity. There can be no machine where a single Principle is left out. In fact a machine cannot exist outside of the Laws. The Universe itself is a stupendous machine. With a Principle left out, the machine would be incomplete.

Out from the Eternal Principles of Nature, slowly and tediously the endless sea of cosmic Energy came

into being. Deep down in the Eternal silence and darkness was the womb that give birth and action to the ocean of Eternal and boundless Life. Darkness is the foundation of Light. Silence is the base of Life. Principles of Nature are the levers of Energy. Energy in action never fails to fix invisible lines. Energy lines crossing a center never fail to intensify at the focus into heat or light or both. Suspended Energy passing the intensified local centers become fixed in a state of rest, a combination of character and record materializes into matter. Matter in the Sleep state becomes the core of resistance to energized influx and the Suns come into being, the focal centers and Arc Lights of the deep. Out of contact came mutuality and natural intellect—a cosmic Mental world. Contact is the fountain source of consciousness, arbitrary directivity, reason, will, individual consciousness, art and the moral law. The Universe in its completeness will be at its finished end. Always in the future. In all constructivity of the building of the present upon the past, the latter surpasses the former in gradual development. While the latter always depends upon the former, in a sense it becomes independent because of its higher and higher expression. Invincible forces at first, automatically worked out. Followed by the flower of Creation—the Independent Intellect—not with a power to convert, change or annul Nature's Laws, but with mental directivity have the capacity to advantageously utilize. †Men no longer are concerned with the exhaustion of the coal beds, the oil and gas fields, for well he begins to know that Nature's boundless source of Energy is waiting to supply the future demands of Man. †

CHAPTER III.

NATURE'S POTENTIALITIES.

(Illustrated)

Plate No. 1 displays a monogram of Nature's Invisible Forces. It represents the Laws, or Principles of Nature as nearly as art can describe them. Each Law is distinct in itself, but ineffectual except as it functions co-jointly with other Laws whereupon they become the cosmic forces of creation. The Laws are fundamental basic potentialities. They are measureless, limitless functions without beginning and without ending. They in fact are the embodiment of their own dimension—the base and encompassment of all creation. They are not THINGS, but the Principles through which all THINGS come into being. Although fixed and motionless they are the source of Energy, States and Planes, measures of Action, Character and Form. In other words, they are the source and base of the Eternal Process from which and through which we (all THINGS) live, move and have our being.

First, in order to exist we must consume Time, and although ever so small, must consume Space. In order to do either we must express the Law of Consumination, which is continually consuming without annihilating. To exist we must cross the Numerical bar, be numbered,



PLATE No. 1.

registered, characterized and materialized. Thus we are embraced by the Law of Affinity and drawn to the plane of our own activity. To act we express in Time and Space, over the Numerical Law in compound addition and thus embrace the Law of Evolution. Having come into being, our inherent quality is expressed by energy expended and resistance overcome, and we become qualified under the Law of Compensation.

Every Character is a matrix or mold through which Nature's Invisible Forces press continually the endless variety of Things we behold.

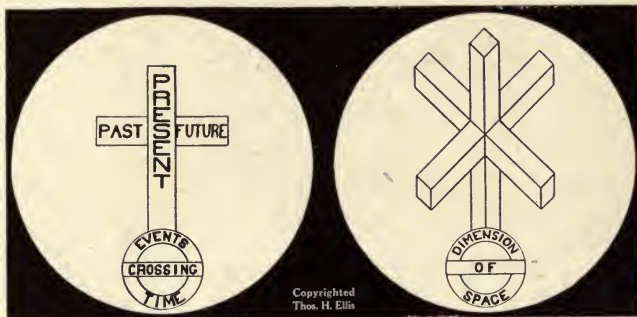


PLATE No. 2.

PLATE No. 3.

Plate No. 2 represents the staff of Time. It is a fixed bar over which all events and things move. The central staff represents the ever present, from which, upon the one hand we point to the eternal past, and upon the other the eternal future. Time is Nature's immovable cross.

Plate No. 3 represents the dimensions of Space. Every point is an infinitesimal center from which invisible lines extend in six general directions toward endless Space. The six dual points verge as they meet at three right angles crossing the center, expressing the third dimension—the geometry of Space. Space is a trinity that, in conjunction with the Law of Affinity in the frost state, forms the hexagon snow flake, and in the heat, or liquid state, forms the rain drop or globe.

Plate No. 4 represents vibration and a right and left inwind motion. The upper line of the plate shows a vibratory motion, the lower left-hand corner represents a right-hand inwind, the one at the right corner represents a left-hand inwind.



PLATE No. 4.

The line at the top in the diagram represents a ball vibrating across Space, at the same time it vibrates across Space it vibrates across Time. The movement over Space creates volume and the movement over Time creates key or character cord. The movement over Time includes the expression of the Numerical Law, which at the rate of sixteen vibrations to the second creates the note of "C." If any other number be produced within the same measure of Time under the same Law it would create another and different note.

The vibrations over Space create volume and plane of activity, if the same ingredient substance occupies greater volume, the movement would express itself within another plane.

The inwinding motion as shown by a right and left-hand wind represents the movement always taken whenever a flowing substance is effected by a tentative vacuum, which when set in motion becomes subject to a greater influence of the Law of Affinity as a central core of the inwind accumulates or condenses.

It makes no difference which way the movement of the inwind takes, for both movements are the same. A difference appears only from which end the movement

is viewed. Looking at the movement from one side it winds to the right; and upon the other side, it winds to the left. When a polar vibration takes place within the rotary motion, a right or left wind is then established. For continuation see Plate No. 5.

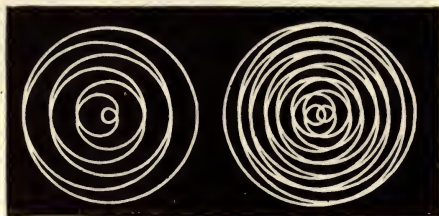


PLATE No. 5.

Plate No. 5 represents a polar view of an inwind toward a common center and a continuous vibratory movement to its circumferential motion. At the same time the revolving movement from center to circumference is expressed, it also assumes an endwise vibration from pole to pole as shown on the right side of Plate No. 5 where both poles are presented to view. For equatorial view see Plate No. 6.

Plate No. 6 represents an equatorial view, with one a right-hand wind, the other a left-hand wind. This illustration shows why one element repels another, which is, for the reason a right-hand wind will not thread up with a left-hand wind.

At the bottom of the plate we illustrate the inwind and the revolving outward together with the polar vibration—screw fashion—giving to Energy the principal modes of motion which constructs the Energy element. This, we have good reason to believe, represents the

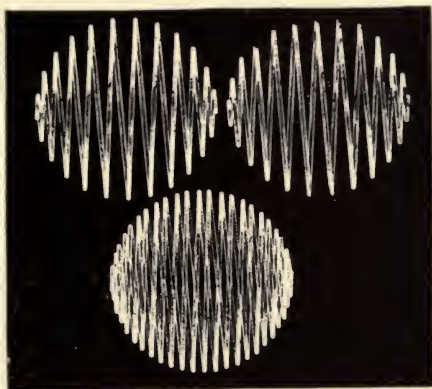
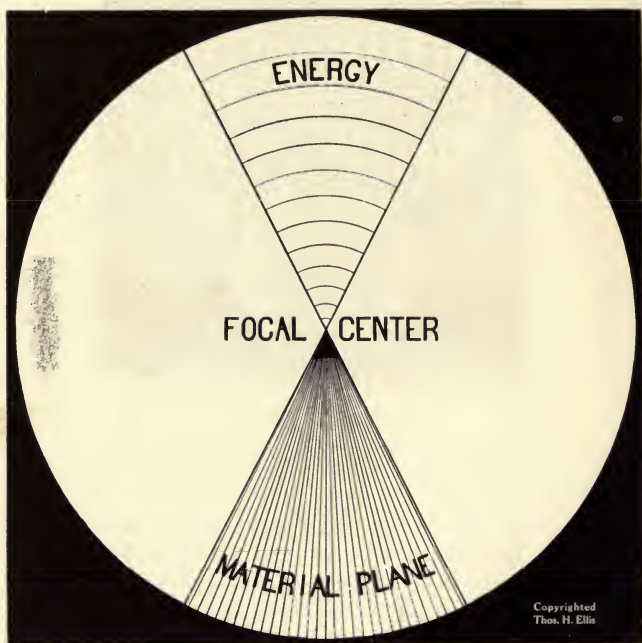


PLATE No. 6.

finest expression to which elemental substance can be traced.

No man has ever seen the element, but the drawings outlined in Plates Nos. 4, 5 and 6 are made in accordance with the laws of motion, and the principles there involved are correct.

Plate No. 7 represents how Space is contributive to leverage energy in condensation and intensification as elements of motion are pressed across focal centers. The process of intensification creates heat or fire, liquidating energy into solidified matter, showing that each and every form of material construction grows from the center outward as its accumulating center verges into matter. We can only give a sectional view, but it must be understood that the energy verges not alone form one, but all sides alike. Matter develops outward in all directions from its constructive center through which energy penetrates, as substance from another plane.



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PLATE No. 7.

All Energy is not transposed to matter in the one crossing of the center, nor can all matter be transposed to Energy in one circuit of motion as a great portion in either case resists change and passes across centers without becoming digested; in the same manner that not all the current of electricity crossing the arc light focus is transposed to light, but much of the current returns to the dynamo supplying it to return in another circuit.

In the case of the influx Energy winding into the Sun, in crossing the Sun's focal center a portion of the

force is expended into light Energy that flows out into Space, while a great portion is converted into heat, and from heat condensed into liquified matter of the Sun, so that in this way the central body is constantly maintained and constructed.

What takes place in the Sun takes place in the construction of every formation, but upon a smaller scale.

You will note that when Energy is forced across a focal center in constructing matter, that building from



PLATE No. 8.

its center and developing outward transposes intensity to diversity and multiplicity. And that by virtue of diversity no two things are created exactly alike, and through the process of multiplicity the constructive forces exceed the destructive forces, thereby perpetuating elements of creation against contingencies or annihilation.

Plate No. 8 represents the four physical planes of the

universe which are composed of Solids, Liquids, Gases and Ethers.

The Liquids interpenetrate the Solids. The Gases interpenetrate the Liquids and Solids, and the Ethers interpenetrate the Gases, Liquids and Solids, as well as extend throughout space.



PLATE No. 9.

The planes that constitute Solids, Liquids and Gases are generally considered the created universe. This part of Creation forms an exceedingly small portion, when compared to the Ether planes out of which the Solids, Liquids and Gases were condensed.

Nature's Invisible Forces express the Laws of action and the results are to act upon the most fluent sub-

stance first, which are the Ethers. The Gases next, Liquids next, and lastly the Solids.

Ethers are the electrical elements which will be treated more fully under the head of electricity. In the case of Solids, Liquids and Gases, these planes unite in composing planetary bodies that actually float in Ether. So that when Ether is acted upon and is moved by the Invisible Forces of Nature, the planets move along with the Ether currents and are at the same time influenced by the Laws of motion as that of matter of denser planes, giving rise to their orbital action, which is fully explained under the head of "The New System of Astronomy," Chapter VII.

Plate No. 9 represents an Ether vortex. The process of concentration followed by the law involving all Efferent Energy in the construction of material forms.

Vortices take place in water, in the air, and in ether. A vacuum displacement in water will cause them in water, and a displacement in the air will cause them in air. But as ether is more fluent than water or air, and much more flexible than air, it is also more subject to the laws of motion than water or air. And since air, together with the planet, floats in ether, any disturbance in ether causes the same disturbance in the air. An etheric cyclone will produce an air cyclone, and at times extend its motion into the solid crust of the earth where it has a freer access than it has in air, and there give rise to earthquakes along with the air storms, as it might effect the melted lava beneath the earth's crust.

It is due to the law embraced in the vortex that Suns and Planets are constructed. It is due to this law that Suns and Planets rotate and revolve. It is also due to this law that the Sun shines.

The vortex has a zero force at its periphery which intensifies as it winds inward and on reaching the center pierces the ultimate, giving rise to the constructive fire that causes ether to be melted into Suns—creating the star specked space—the heavens around us.

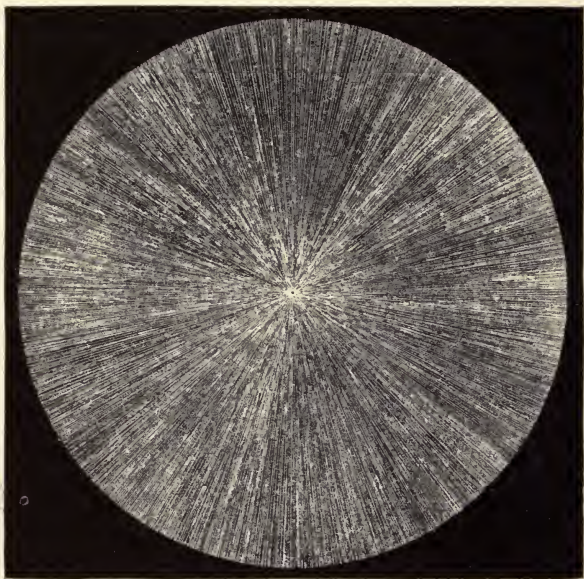


PLATE No. 10.

Plate No. 10 represents an infinitesimal center extending Efferent Energy toward endless Space in multiple diversity. This is the expression that always takes place in the formation of a vortex. It is known as the evolution that follows involution. The lines running out from the center are character lines, and there is not a *Thing* in all creation that has not evolved through this

process; and in doing so establishes character by environments met.

Every *Thing* has not only come into being by this process, but every organic formation is operated and maintained by it.

In respiration we take into the lungs and eliminate air. The blood flows out through the arteries and re-

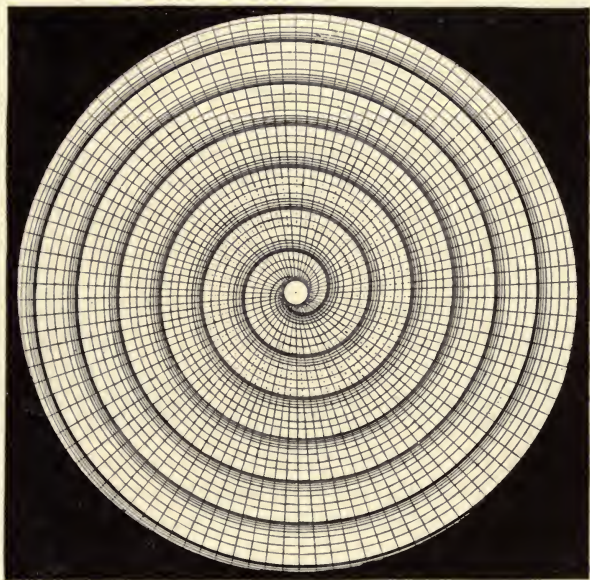


PLATE No. 11.

turns through the veins. Ether rolls into the Sun and is cast off in light Energy. Vegetable plants take on the Energy of the Sun light and with that Energy construct their forms, their fruits and seeds. The sweetness of the fruit or the perfume of the flower alike

depend upon the light rays of the Sun. Not a molecule is constructed unless it be supplied from the influx from without.

Nature's Geometrical Law is a line running from and to an infinitesimal center.

Plate No. 11 represents Affherent and Efferent forces working in unison. The inwinding lines represent the Ether influx and the diversified lines leading outward represent the Sun light energy flowing into Space. All this process is brought about by the Law of Affinity—Gravity—as it works over the principle of space. The power of a circumference exercising leverage over a center. By reference to Chapter No. VII a full explanation will be given, showing how gravity operates to produce perpetual motion. The following plate, No. 12, will illustrate the invisible forces operating our planetary system.

Plate No. 12 represents the Invisible Forces operating a Solar System. You will notice the inwinding Ether that carries the planets around the Sun at the rate of $19\frac{1}{2}$ miles per second, which gives to the planets, on account of their denseness, a centrifugal force that holds them out in space against the attraction of the Sun. You will also note the Sun light Energy striking the planets, providing a resistance upon the peripheries of the planets exposed to the Sun, causing the planets to rotate as they float around the Sun within the Ether disc; showing the two-point contact of energy expressing itself over moving bodies in line with the movements made.

Ether being less dense than the planets is also less effected by centrifugal motion, and winds its way into the Sun, leaving the heavy bodies out in space within

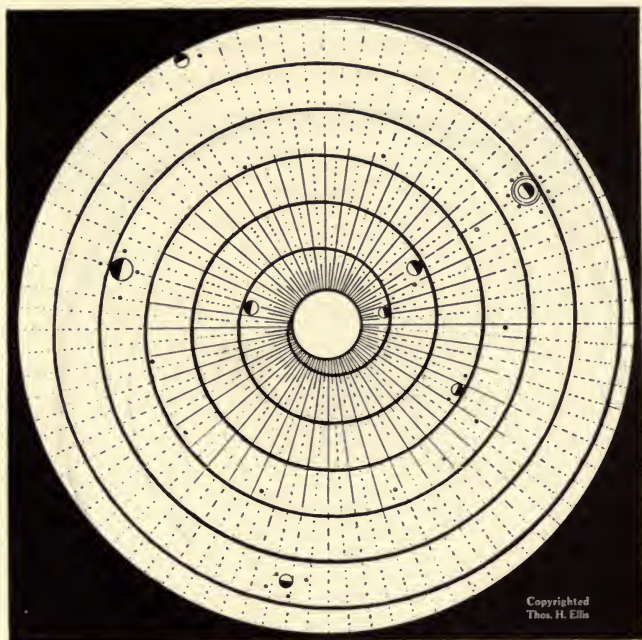


PLATE No. 12.

the influence of their centrifugal forces. So it will be seen that the gravity of the Sun that draws the Ether into it, is the same force that supplies the momentum to keep the planets out, as well as the force that causes the arc light of the Sun and through the light rotates the planets upon their axes. All of which is a self-perpetual mechanism promoted by the principle that a circumference leverage has over a center.

Plate No. 13 represents our Solar system, without showing the Invisible Forces.

Plate No. 16 represents the old theory of how planets came into existence by being cast off from a revolving Sun.

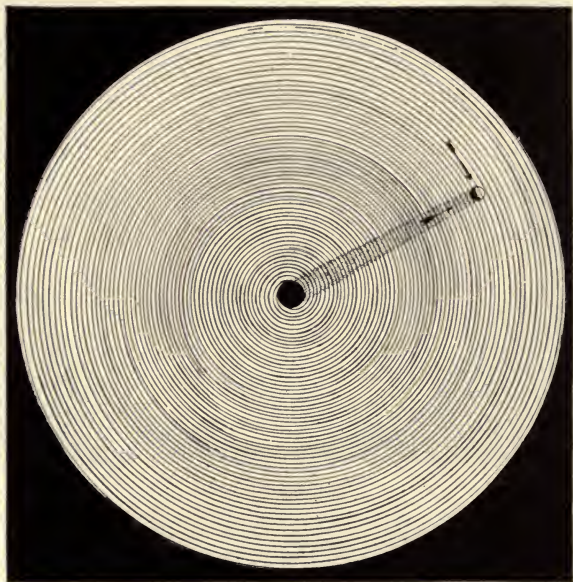


PLATE No. 14.

If planets were ever cast off from the Sun they would rotate directly opposite from that of the planet casting them into space. You will note by the arrow the direction of the revolving Sun and the effect that would be produced to the body that took birth if such events could possibly occur.

Centrifugal force always plays to straight lines. The revolving motion provides a tangent at first, but soon



PLATE No. 15.

assumes a straight line, as that of the Sun light. In order for the Sun to cast off a portion of its own body, it must be supplied by an energy from within.

Before a Sun could throw a portion of itself into space at the rate of $19\frac{1}{2}$ miles per second, it must also revolve upon its own center with its surface traveling at that speed. But it is conceded that the planets travel at least twelve times the speed of that of the Sun's equator which is supposed to have set them in motion. Furthermore, if the planets were ever cast off from the Sun they are bound by that principle to rotate opposite from what they now do.

Plate No. 17 represents on the right, the shape the

Sun now appears because it is confined under the pressure of a vortex motion where the energy revolving it is supplied from without, thereby keeping that molten body in a symmetrical globe.

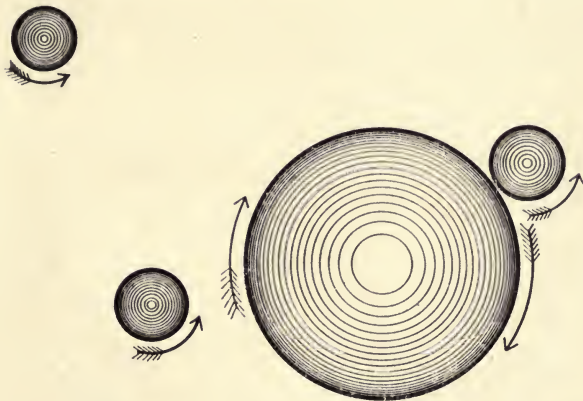


PLATE No. 16.

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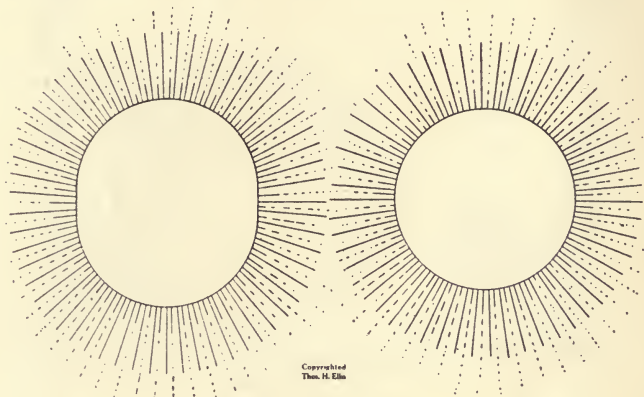
If the Sun rotated upon its own momentum—a source from within it would take on the shape as that represented in the left-hand side of Plate No. 17, on account of centrifugal force governed by its rotating surface travel of 4,500 miles per hour.

Plate No. 18 represents the motion of the Earth and Moon as the Earth rotates upon its own axis and semi-effectively revolves around the Moon.

The line between the Earth and Moon represents the gravity tie between the two planets, and the point of equilibrium of motion between the Earth and Moon as the Moon revolves around the Earth! This motion causes the earth to take a zig-zag route in its revolving

motion around the Sun, and explains the cause of the moon tide and the centrifugal motion of the Earth that gives rise to the tide on the opposite side of the Earth from that of the Moon.

Plate No. 19 represents how the light of the Sun effects the tide and planetary attraction.



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PLATE No. 17.

The Sun is four hundred times larger in diameter than the Moon. But the Moon is four hundred times closer to the Earth than the Sun, therefore the planetary attraction should be about equal. The Moon tide, however, is four-fifths greater than the Sun tide, which shows the effect light has in overcoming attraction. It also shows that where two planets are brilliant they would entirely overcome gravity, and like the stars in space, press apart according to the power they have to shine—the capacity of their efferent forces.

Plate No. 20 represents the Mineral, Vegetable and Animal Planes. The object of which is to show the

reader the base and lineage of Organic Life. The center represents the Physical Plane. Upon the Mineral Plane we show the Vegetable Plane, for it is upon the Mineral Plane that the Vegetable depends. Out of the Vegetable Plane came the Protoplasm. Protoplasm is decomposed vegetable substance. It may also be considered as vegetation under the process of digestion or chemical action. Vegetation in that state or condition is frutitious for

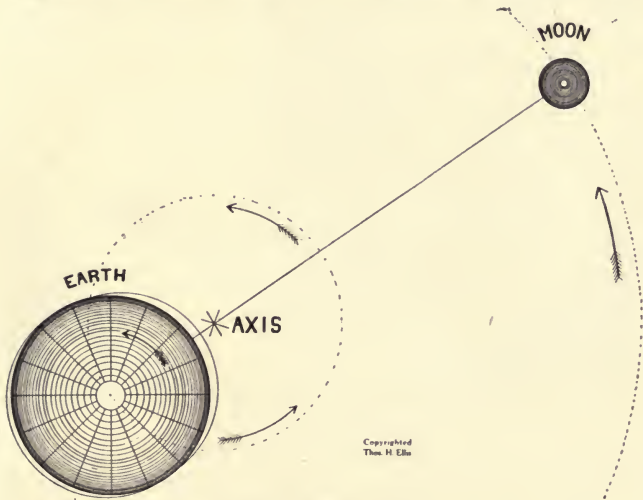


PLATE No. 18.

animated activity. Warmth, moisture and darkness followed by light is the essential elements, with the Protoplasm as a base, to bring into being the little animated form known as the Amoeba.

Just outside of the Protoplasmic Plane is represented a single Amoeba. This single Amoeba grows and divides into two creatures; the two then, like the first,

grow and divide, and then we have four creatures; the four grow and divide, and we now have eight creatures; the eight grow and divide, making thirty-two creatures, and thus the process goes on, doubling up by division *ad finitum*. This illustration explains how one Amoeba by growth and division, in five generations can become thirty-two. Each of the thirty-two are equal parts of the first Amoeba, each the same age, with each bearing the same line of inheritance and character. The illustra-

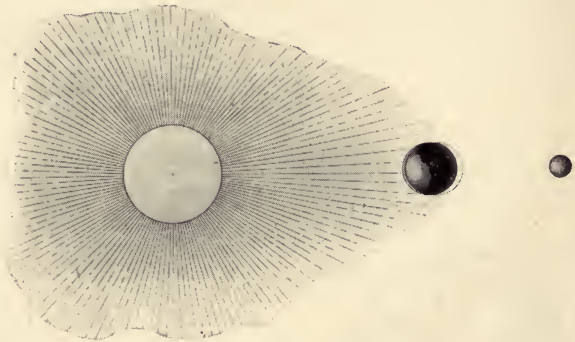


PLATE No. 19.

tion also makes clear what is meant by type lines, or life lines.

The Amoeba growth and division process illustrates how paternal inheritance, when impregnated into a single cell or molecule, grows and develops into a full grown character unit from the within, toward the without. It shows that new cells are not added to a form in order to construct it, the newly added cells would require to also be impregnated like that of the first, but the character grows as the cells grow, to suffer division in a continuous unbroken line as the cells themselves



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PLATE No. 20.

do and multiply by division. All warm-blooded animals, including man, build their bodies through the growth and division process from a single molecule. This first molecule bears the primary mind and character intensified by a dual parental source—in other words a union process.

The manner in which cells or molecules grow and divide, shows how we are enabled to continue our mental existence without a break, from childhood to old age, that is to say, remain constant while the physical

body undergoes continued wearing away and renewal.

The Animal Plane represented in the drawing, illustrates the process of re-generation under the *union process* of character building, wherein thirty-two parents through the law of inheritance in five generations centers on each individual born. It does not stop at five generations, but runs back through the ages, doubling up in number each generation.

WHY THE COMPASS POINTS TO THE NORTH.

There is no part of space so far as we know that is not filled with Ether. When a planet rotates upon its axis it throws Ether off at its equator and takes Ether on at its poles, and as the planet rotates, one pole winds to the right and the other to the left, which gives the polar resistance found in magnets.

When a bar of steel is magnetized it gives to it the effect of arranging the molecules composing the steel all to the right or all to the left, as the current may be applied, so that when the bar is placed upon a point and well balanced it immediately turns the bar in line of the Ether flow on the Earth's surface, in a line with the arranged molecules in the magnetized steel. The one end a receiver, the other a resistance, and thus the needle or bar of steel takes upon itself the current passing from the planet's pole toward the equator along the line of least resistance, much in the manner a weather-vane would be in a current of air. The bar of steel being a better conductor for Ether than air, it naturally takes the route of the steel as that of least resistance.

WHAT IS ELECTRICITY?

Electricity is a fluid, finer than that of air. It is "ETHER," fine, flexible matter of our fourth physical plane. ETHER is an elastic and flexible substance and

being finer and more flexible than air, moves first under impulse of motion or energy expressed. It passes through steel very readily, but is resisted to a great degree by air, as will be seen by its manifestations. Electrical Fluid Ether can be mechanically propelled through the vacuum process commonly called magnetic voltage or through the centrifugal force as dynamic current pressure, alternating or direct; or, it may be produced by friction or a chemical process. The current is compressible according to the mechanism behind it and can be packed or stored away in receiving jars or compositories, called Storage Batteries, and there held for future use, provided it is of a low voltage; or in plainer words, coarse enough to be retained without filtering out. A very high voltage cannot be confined.

A low and coarse voltage passes through the air with difficulty and thus may be easily kept within its confines and carried miles over an insulated wire with little loss by leakage. In case of a current of low voltage it is necessary to use low current motors to receive and utilize the force of the current; in which case the energy is transposed from the low current motor to a higher speed dynamo by a belt, and the higher speed dynamo produces a higher and finer current, depending upon the construction of the dynamo and the speed maintained. When the current is high enough and fine enough it will pass through the air to a great distance (as well as through Ether in the normal state), whereas the low current, such as is used for running machinery, lighting cities or running street cars, cannot jump a gap through the air to exceed one-sixteenth of an inch.

Where the current is reduced to a fineness or very high pulsation it can be sent out through the air in a

constant stream, such as is the case in wireless plants to distances of many thousands of miles; just like the Sun throws out its light rays to exhaust their force in space, and there again to be reabsorbed in the Ether's endless sea surrounding our planet.

The Sun rays impregnate any object that they happen to strike and reproduce their character in light and heat, while the artificial Ether current from our wireless plants would exhaust its force unobserved, but for the fact that we disturb the current by agitation which is caught up by receiving instruments within the radius of its force, provided said receiving instruments are keyed in TUNE with the agitating instruments, in which case the agitation is reproduced; whether it be of the telegraphic key or the human voice through the Etheric current flowing in all directions and bearing the character of agitation in the most minute detail, giving every peculiarity of the personal voice of the operator. It is the voice, the sound, the agitation that goes out with the flow of Ether, like chips floating out on a stream.

Electricity is, therefore, Ether in its normal state, 240 degrees below zero, manifesting on any key from that of substance finer than air, to the extreme fineness of heat and light. Compressed Ether known as Electricity is cold, but its movement over resistance causes agitation and heat, if it be forced across air, as in the case of burning out a safety fuse we see it manifest in fire as well as the effect of explosion, giving vent to its compression. We must note also that Ether can be confined to an extreme pressure, but in case of a steady open dynamic supply the current could not be produced beyond the supply, and this probably is about

100 pounds to the square inch in Ether pressure. It is by virtue of this pressure that the dynamo is enabled to throw into a receiving field by centrifugal motion the amount of the inflow to the receiving poles, and no more. At the same time the dynamo driving the current extends the effect of the current in coarseness or fineness according to the construction of its mechanism and the pulsations made in a given space of TIME.

Water is supplied to a pump according to the air pressure behind it. A tube is a container through which the air is excluded and in which the water flows.

In the case of Ether a solid bar of steel becomes a tube, excluding the air; but open to Ether which enables it while thus insulated to produce an etheric vacuum (Magnetic), or to charge with an ether pressure (Electric), so if we could observe the current as it passes along the wire it would present a vision resembling a string of beads.

Chemical, or in fact, any heat when applied to Ether sets up an activity, and when it is applied to a bar of steel suitably proportioned and prepared to register its activity, and that bar of steel be plunged into cold water, the agitated Ether immediately flies out of the steel into the receiving field (Water) and leaves in so short a space of time as to leave a perfect imprint of etheric action, which we call temper within the steel, and this record will remain in the fixed molecules as memory, characterizing it until it again is subjected to a change by repeating the process in a greater or lesser degree.

Agitation of the elements generate Ether to a finer condition and thus like water turning to steam requires

more space, and when this takes place in the clouds place separated from the earth by space of air, which is a non-conductor in normal or near normal Ether, and confines it to the clouds until it becomes a pressure and subject to the principle of Affinity, where it is attracted to the greater body within the confines of the Earth of a like vibratory condition, and as soon as the charge within the cloud becomes agitated to a high enough pitch to enable it to cross the air space between, it does so taking the line of least resistance and toward the point of greater attraction within its scope. When it creates the effect of expansion, if the object or point of meeting be a tree, it will often split it open. If the cloud generating the Ether energy was larger than the earth the current would flow toward the cloud instead, and the danger of lightning strokes would be transferred to the clouds.

The scientific world have generally recognized that electricity was an Ether. The fact was more or less vague because of the wide scope of its activities and its susceptibility of taking on so many keys and planes.

In its lowest state it is dark and silent, at a plane 240 degrees below zero; at 65 degrees it moves particles of matter in the construction of the fungus growth of plants, acts in the chemical process of combustion and decomposition, as well as becomes subject to the mental directivity of cold-blooded animals. At 98 degrees activity it becomes subject to mental directivity of warm-blooded animals and fatal to their control below that of 90 degrees or higher than 110. When at an agitation of 300 degrees it takes on the ember, next the flame and on upward to that of the immense Heat and Light of the Sun.

HOW MOTION CONSTRUCTS.

A human life is but a flashlight scene in the annals of Nature. Because little change is observed does not debar us from a wide grasp if we but analyze the parts that come within our range of view. To know a grain of sand is to know the Solar System; to know Thyself is to know All Things.

Energy expressed leaves its record according to the resistance overcome. The Law of Motion leads to diversity in its evolving outward and to intensity in its enrolling inward, thus the seed is the sleep state of energy expressed in potential intensity. A motion once made becomes the life line of endurance. It is the record of the act performed, and characterizes itself by the route taken. Character once established moves in the potential, ever constructing today upon the yesterday over invisible lines within forms.

To avoid going into the technical work we will call your attention to but a few facts, namely: The line that the sap travels up a tree gives to the wood of the tree fibers of endurance and strength; the start and stop of the sap from the wake to the sleep state marks its time in the grain of the wood, while it never fails to designate its specific character within itself, the enduring record of its past and finally intensify its potentialities in its focal center—its seed. We know it when we see it, and we read within its soul the memory record of its past. What is true of the tree is true with everything from the fire-formed rocks to the plane of animated life. Even to the lowest forms of matter—clay pulled out, takes on a grain in the line it was forced to move; iron rolled takes on grain and tensile strength; glass pulled out into threads may be woven

into cloth, as with all elements of solidified matter. A beautiful illustration is manifest in the life line of energy passing from bud to the flower in the cotton plant. The line passed over in the cotton boll when the milk of the boll is absorbed into the seed becomes the lint we so highly prize.

Energization and Motion is Life. Life is a Principle, common property to all Things. It cannot be taken or given. It is character that takes on form and moves down the lines of Time as they tediously compound, consume, regenerate and evolve from the primordial first motion to the exalted combination of an arbitrary force of mental directivity.

CHAPTER IV.

FOUR GRAND PHYSICAL PLANES.

There are four grand Physical Planes in the Material Universe, namely: Solids, Liquids, Gases and Ethers. Liquids interpenetrate the Solids; Gases interpenetrate the Liquids and Solids, while Ether interpenetrates Gases, Liquids and Solids, and so far as we know, extends to all interstellar Space. Solids are the grossest forms of Matter, the most condensed and inert, and are the closest allied within the Sleep State of Nature. Liquids, while Solid, are fluent, Gases are fluent, compressible and expansible, Ethers are more fluent than Liquids or Gases and are a thousand times more compressible than the Gases, while at the same time susceptible to innumerable divisions into sub-Planes and penetrating activities.

Ethers condense to Gases, Gases condense to Liquids and Liquids condense to Solids. The three grosser planes form the solid part of creation, that cling to focal centers, and in the aggregate form, the visible Universe, which is but an exceedingly small part of the whole, and this small part of the whole we call our solar systems which floats in endless Ether.

Solid matter contains some ninety odd elements which are susceptible of separation and analyzation. The elements maintain their own characteristics, because in their very nature they are fixed in the sleep state, which means resistance to change, or in other words, fixed within the grasp of the Numerical Law—characterized.

All the elements of solidified matter may be combined in one mass or held separate. If held separate may be dissolved and reunited without losing their distinct characters. Every operation to which matter is subjected, takes within itself the record of its operation, so that matter always maintains the memory of its past. It is because of this fact that stones bear their distinct character and are distinguished one from the other as granite, flint and marble, and traceable as such on sight. The same is true of metals, for when melted they congeal into globular masses under the law of rotary motion, but when subjected to puddling, stirring, rolling and pulling, are made to take on records of the movements to which they are subjected, and in this manner conveys cast metals into what are known as wrought metals. Cast metals have the molecular form of globes, and wrought metals have the form of fibers of endurance and strength, in keeping with the movements the working of the metals have been subjected to. We do not know where the limit lies, but we do know that ordinary metal, worth two cents per pound, can be worked and refined to such a degree as to be worth several dollars per pound, which all goes to prove that matter bears a record of the environment to which it is subjected; that record established becomes its quality and character, and that it retains in memory that which it has acquired. Grosser matter lays deepest within the state of rest, and its records are most easily observed. What is true of matter in one plane is true in all planes with this difference: the grosser the plane the greater the resistance, and the greater the resistance the greater the compensation. On the other hand, the finer the plane the less the resistance and the more fluent; hence it is that basic and concrete

construction must first have basic foundation as a base-line in order to establish a firm foundation for permanent and concrete constructivity.

Liquids penetrate solids, but as their planes are closely allied, the process and capacity that one may interpenetrate the other, is slow and resisting. Gases interpenetrate the liquids with the same difficulty, and for the same reason that they, too, are closely allied in fineness. Ethers interpenetrate the gases, but as gases are closely allied, like that of Gases and liquids, the one resists the other. But when it comes to Ether interpenetrating the Solids, we note a wide difference in their respective planes, and in a like measure a lesser resistance is offered. Ether, in its process of interpenetrating solid matter, and in the case of some metals, it offers little or no resistance, as is shown to be the case of a current of Ether passing through steel. The same current, however, is strongly resisted when it comes in contact with air—the plane of the gases.

The four grand physical planes cannot all be seen by the unaided eye, but they can all be felt by the sense of touch. There are elements of the grosser planes of matter that are quite transparent, such as those allied to the glasses. When we arrive at the plane of liquids they are largely transparent, and also the Plane of gases are quite transparent. In fact we should not be able to see the gases at all, were it not that they act as surface or sight line refractors which are plainly noticeable under heat rays. When we reach the Ether planes we cannot see Ether at all, except we can notice its effects as produced, when it is forced across air, gas or carbon, producing a glow of light. But while Ether is quite transparent to the eye, it is easily felt as it touches our

nervous system, giving us a sense of cold, which sense of cold is transposed to heat if the vibratory waves of Ether are increased in intensity, which may reach many thousands of degrees, like that expressed in Sun light Energy.

Our physical forms are made up very largely from the Liquid planes. A very small portion is constructed from the solids, over ninety per cent is water, and the whole body is solidly compressed with the Ether, to which we are indebted for efferent energy that readily and fluently yields to the arbitrary command of the will as it moves under the influence in filling our muscles in the process of moving our anatomies. We do this because Ether can be directed to flow over them at our command. Were it not for this fluent Ether matter we could not feel, let alone move, because there would be no substance in matter that would be fluent enough and susceptible to the command of the finer forces like that of the mind. Therefore, while it appears that animated forms are constructed and maintained by solid matter, it is evident that the most important, and by far the greatest, uses and utilities are supported by the finer planes as well as through these planes made operative.

While animated forms are capable of directing the use of Ether, the forms, in order to do so, must be composed of organs of consumption of Energy and storage batteries, to which the brain and spinal cord become the principle agents.

When every part of the form and mechanism of the body is in a normal condition, all works well, but if it becomes in a measure unjointed, the keys of the storage battery at times turn loose, and we find our forces working involuntarily, in which case muscles move without

the command of the mind and at times lock up in cramps, refusing to release at the command of the will.

The grosser forms of matter known as Solids are composed of the spent matter of the finer planes; so that in the complete analysis, solid matter is Energy condensed to a state of rest. Matter is therefore record of actions expressed—it is not motion, but is the record of motion.

Considering the fact that solid matter is the record of motion expended, we have found intellectual minds ready to assume that matter is Mind. They think so because matter holds its record and character. When we come to analyze the method by which Matter gets its record, we note that automatic action and environment are the principal causes of all Natural records, and that wherever arbitrary directivity is applied it is readily discerned to be an expression of art, which in either case is but memory of its past. Shall we concede that Matter is Mind because it bears a perfect record and maintains its character? Furthermore is Matter Mind because it maintains fixed invisible lines over which it is enabled to reconstruct? No! It has but one function: that of Memory, while the mind has no less than six grand functions, with some eighty odd minor functions. A more complete analysis will be given under Chapter XIV—"Functions of the Human Mind."

Solid matter is subject to transposition from the state of rest to that of a higher plane through the process of decomposition, combustion and reconstruction under the chemical process, to the breaking down of matter and reconvertng it into other planes and forms, as well as converting a portion of that of Energy which in turn becomes matter again. Under Chapter X, "The Law of

Heredity," this question will have our full attention and be given complete analysis.

Within the plane of the solids we have ninety elements of differentiation which to a degree may be termed sub-planes. In the Liquid planes are to be found sub-planes. In the gases the number of sub-planes are extended, but when we come to consider the Ether plane we are safe in concluding that a vast field is opened up to separate planes, varying from a normal state of say 240 degrees below zero to upward of 18,000 degrees above—all of which is a matter of fineness, or a rate of vibratory activity. Herein lies the virgin soil from which all baser matter is condensed.

Within the four physical planes of Solids, Liquids, Gases and Ethers, are other worlds commonly called kingdoms, which are known as Mineral, Vegetable and Animal. In each of these Kingdoms are contents of all four physical planes with the differentiation that the mineral planes contain a greater portion of the solids and each kingdom above that of the minerals contains less minerals.

A great part of vegetable forms are composed of carbon, the balance Liquids, Gases and Ethers. While in the animal kingdom a very small amount of the mineral formation goes into their bodies, the greater part being liquids, gases and ethers. Therefore while the three kingdoms are separate in a way within the four physical planes, they are nevertheless compositions made up from the four physical planes, which also comprise a new development that takes root in the base line of the mineral kingdom and evolves to vegetable and animal forms of life and through these formations to a state of consciousness.

The universe is composed of the Laws of Nature embodied by the Four Grand Physical Planes. We are encompassed by the Laws of Nature, and exist in the midst of the four grand planes of matter. We stand upon the solids, feed upon the liquids and gases, and use the Ether as a fluent substance to convey energy in moving our muscles, including every expression of sensation.

How little credit we have given to this all important substance, without which we could not move, breathe, think or feel.

CHAPTER V.

THE DUAL PROCESS—WAKE AND SLEEP STATES.

Every visible manifestation is the result of energy spent. Everything is maintained in activity by energy expending or held by inertia in the sleep state. Each and everything has its dual expression, and each and everything in existence is a result of motion expressed somewhere, between absolute silence on the one hand and extreme intensity of action on the other. Silence is the mother and action the father. Herein lies the causal condition for everything; the thing itself being a compound of dual expression. The dual process is a working toward the infinitesimal center, and from the infinitesimal toward the infinitude.

Whatever comes into being must exist somewhere between these points and partake of them both, with the generality of leaning to one or the other side, and toward that side it is closest allied.

Everything therefore has a dual inheritance, and records its movements and character, and carries with it the record of its creation. In other words, everything is a miniature photograph of its creation and character.

Every constructed form whether it be of gross condensed matter, vegetable or animated form has its beginning within the absolute, a dark and silent center, and from that infinitesimal point must develop into being, by evolving toward outer space. Any movement leading outward is a movement toward endless diversity, so that each and everything coming into material expression traverses the route that propels it to multiplicity and

diversity. This is the law of growth which provides that there are no two things in all the world exactly alike. In fact where growth adheres to the law, it is impossible that any two things should be alike. No two things can come out of one and the same center, although they may happen to grow side by side and consume the same given time. For no two things can have the same and exact center while occupying the same and exact plane of existence.

In the chapter on the "Four Grand Physical Planes" we endeavored to show how one state of matter interpenetrated the other, in which case it is readily seen that all interpenetrating planes might rest upon the one center. But it is quite another thing when bodies of the same plane of existence, or of like substances, grow side by side, for it is impossible for two like substances to interpenetrate each other.

Anything that comes into being and develops to a state expressing a higher plane of action, such as having the power of re-generation, it then becomes a species or type, and the type extends its growth to diversity. Each re-generation of a type maintains the line of its established diversity as a fixed characteristic, and each re-generated individual inherits the type expression. Nevertheless each individual develops his individual characteristics to that of diversity, because the individual, like the type itself, expresses the same law of growth. Therefore, although of the same type, no two individuals can develop the same and exact characteristics.

For illustration, we have two oak trees; they may be the same kind of oak, at the same time the leaves on the one would appear like the leaves on the other, but when

closely scrutinized it will be impossible to find one leaf duplicating the other in detail, and this is true although the search is confined to one tree instead of the two. They are alike in character but not alike in detail.

The reason that type lines are established and maintained is because each type, like each individual, moves toward the active and diversity side in development, and is maintained to the type line because of the tentative function of silence and immovability of the mother side of the type line expression. In other words activity tends to development and diversity, while inactivity tends to stability and adherence to the type expression. The father side of constructivity always leads to development and diversity, the mother side always holding fast to the lines established, and so it is that while all things advance, everything maintains itself in its own character distinctions. Thus all things are bound to the wake or sleep states of Nature, or both.

The active state is Masculine, and the silent state is Feminine, which means that a thing to exist must of necessity imply the condition of duality. But duality plain and simple is the condition of extremes, and each and every character, form or type, must be within the limits of the extremes, so while we have Masculine and Feminine expressions they are only tentatively so. In this sense we have no absolute Masculine being nor have we absolute Feminine being. What does exist is a combination of both Masculine and Feminine with a tendency to one or the other in greater or lesser degree. And why is it so? Because every individual has his dual inheritance, and as such is not a progeny of one, but of both Father and Mother.

Each and everything that occupies space as an indi-

vidual must have a form and a combination composing that form. To have form is to have a center and a circumference. The center must be the exact opposite of a circumference, and thus each individual is a duality in form. If the individual should adhere closer to the Masculine than the Feminine, he would be called Masculine. If the individual shall lean toward the Feminine, she would be called Feminine.

Each and every individual is a dual expression because every individual is an inheritance of a duality—Father-Mother. Individuality takes berth when the dual life lines meet at re-generation. Every individual, mentally speaking, is not only a duality, but every individual lives a dual life, as he swings too and fro in his daily activity, from wake to sleep, and from sleep to wake. In the day he moves in the wake state and at night passes to the sleep state. And so all physical lives are a constant vibration from one state of existence to that of the other.

In the vegetable kingdom, the warmth of summer sets up activity and the frosts of the winter put that activity to sleep again, so in the vegetable kingdom the annual process is from the wake to the sleep and from sleep to wake. The wake state means development out from the center to constructivity. When frost calls it to winter's sleep, it ceases action and records its season's activity in its constructed form, of fiber and seed.

Thus season after season and layer after layer the constructivity goes on. All forms of nature are builded under the vibratory process between the two states of existence. It records character in individual formation into matter by energy expended and focally centers its essence of that record and character in its re-generative center—its seed.

Dual lines reach back deep into the eternal past. The lines, though invisible, are none the less real, and it is from these lines that form the thread of life to which each individual primary mind and character is woven—whether it be vegetable, animal or man. No individual is complete in himself alone, as he represents but one gender of an expression that requires the other and opposite side before it be a complete unit.

Every physical form is a gender. But every mind is a unit, and has its connecting lines reaching down through the ages of the past. The type of which each mental unit is a part is held by dual threads which is more fully covered in Chapter X. under the "Law of Heredity."

The phenomena of action is a manifestation of Life. The phenomena of sleep is the temporary pauses of action of Life. Life is a principle—it is Energy in expression. In activity it demands more space, and to all intents and purposes makes a greater use of Time. For the greater amount of movements and changes, the greater amount of duration is expressed. Action consumes time and constructs character, record, memory and matter. While on the other hand, silence creates no duration, no change, no record, no matter, and to all intents and purposes is inert within space. And as to Time, it is a blank. Ten hours in the active wake state goes into making ten hours of record building. While ten hours, if in perfect sleep, is but an instant to that of which the sleep applies. Why? because it ceases to act, it ceases to record, it ceases to be operative. It has but two events, going into the silence, and coming out, with all the time while in the silence a blank. Having now laid these facts before your mind we wish to emphasize the further fact that one part of a combination can, and does go into the sleep

state, while the other part of a combination remains in the wake state. Thus the mind may go to sleep while the physical body remains active under the magnetic energization of its consuming and reconstructing process.

Taking into consideration the mind: that part of the organization that is most susceptible to the state of sleep, we must keep before us the fact that the mind has its center and circumference and that that function of the mind which constitutes memory is always over ninety-nine per cent in the sleep state. That there is, on the other hand, that portion of the mind we call imagination that is most active, far reaching, and extensive, and less subjected to the state of sleep, so much so that while the memory and reason are enwrapped in sleep the imagination is oftentimes still very active. It is not wholly drawn into the state of silence or sleep, and while thus expressing we call it dreaming. Dreaming is always going on, but in the wake state its activities must be sent to the state of memory over the function of reason, which serves to build a concrete mental construction. Imagination is the forager of the mind. It is exceedingly fluent and active. Its activities may be said to be the expending of mind energy, and if reason is in the rest or sleep state the activities of the imagination will be greater than where reason is in the wake state, because reason acts as a bar of judgment and resistance, thus restraining the activities of the imagination.

This phase of the subject will be treated more fully under the head of the "Functions of the Human Mind," Chapter XIV.

The human mind proper is accustomed to rest in the state of sleep about one third of the time. That is to say, it is active twice as much as it is in the state of rest. In

the case of the physical body the energy is acting all the time, consuming cells or molecules of one kind, then constructing to other molecules, which in their construction, are silent for a time in their development and then broken down and eliminated. But while this work is going on, the body as a form is never in the state of sleep so long as its animated energy is vibrating within, but the molecules of which it is composed are.

In the case of many insects the body goes into the sleep state as well as the mind and remains in that state of existence from three to six months of the year. This characteristic is also common with cold blooded reptiles, frogs, lizzards, etc. In cases of the sleep of the physical body along with the mind, we note that it is due to a temperature environment. When the temperature drops toward the water freezing point these creatures go into the sleep state and remain there until again aroused by returning heat waves. It is not an uncommon thing to see frogs hop out of melting ice that have been imprisoned there by the previous autumn freeze and remain unharmed, to thaw out when the ice melts. If they can remain in that condition six to eight months without experiencing any inconvenience, why not a longer period?

The six months' winter sleep of cold blooded creatures has no more effect upon them than the eight hours' sleep of the warm blooded animals, excepting in the case of warm blooded animals the body does not go to sleep with the mind, and the state of sleep cannot be so complete.

In the case of mental sleep two events take place. One is going into the silence, the other is coming out, with all the time between the two events a blank. And when no events take place, no change takes place, and when no change takes place, the time is as if entirely eliminated.

If there is no change to the mind that sleeps, there certainly is no change to the body during its winter's sleep; since it, like the mind undergoes but two events: passing to inactivity and coming back to action again. Furthermore the body that sleeps, usually sleeps in a frozen condition, which further insures it against a process of decomposition. In the case where a perfect continuous state or condition is maintained, there is no reason why the usual six months' sleep could not be extended into years. And why not, for perfect sleep means permanent fixity for the time being. In other words, no change means no disorganization.

There is a varied difference in the physical bodies of the different type expressions in their extent and manner of wakefulness while the mind is asleep. The physical bodies of warm blooded animals do not sleep, they are ever active. The heart and arteries continue to pulsate. The blood and nerve fluid constantly flows. The respiration does not cease. Strange as it may seem the physical body is always on guard to approaching danger. Most of the animals lie down when they sleep, some can readily sleep while standing on their feet, like that of the horse type.

Rabbits sleep with their eyes open and readily see danger as it approaches them. In cases of this kind the physical body stands guard over the sleeping mind to arouse it when danger threatens. Most all animals have their ears on guard all the time to threatening danger, and seldom fail to arouse the sleeping soul within. The physical body can even be charged with a duty to arouse the slumbering mind within, at any given time that the mind might suggest on entering the sleep state, and it

seldom fails to give the signal at the time fixed upon. The individual mind gives the suggestion and it is the individual mind that is aroused. If not by the physical body, then it certainly is by the immortal soul within.

Before departing from the question of mental sleep there are a few peculiarities we wish to mention. Nature seems to favor darkness and cold for natural states of sleep. First because darkness is negative and cold is also negative. But not all creatures live strictly to that rule. Some animals sleep at night, others at day time, and as a usual thing animals that sleep in the night time are more peaceable and docile. The night sleepers usually raise the palms of their feet at an upward inclination and roam about during the day time. While the night roaming animals sleep during the day with the palms of their feet flat upon the ground, and are momentarily prepared to spring to flight in self defense, or to jump upon their prey that may happen to come near them. Calling your attention now to the material world, or more strictly speaking basic matter, we have this to say:

In the arts and sciences our endeavor is to work the metals of matter by refining them down to their own specific ingredients, which become the more perfect as such, the nearer they are brought to the state of sleep or rest. In other words a state to which they offer the greatest amount of resistance to change. One of our precious metals when reaching that state we call pure gold. Ordinary iron in its original form is worth one cent per pound, but when refined down to its most specific character becomes seven hundred times its original value because of its increased power of resistance. And in this increased power of resistance lies the virtue of its utility in the manufacture of tools that may be used to chisel,

carve and work down other materials that are in the sleep state of Nature, with a less tenacious resistance. Such metals are susceptible to take on records of refinement known to the arts as tempering. A piece of steel passed through the process of high tempering and toughening, which is a still deeper state of sleep, raises its power of resistance so much greater as to enable the latter metal to cut the same metal with this temper lacking.

We are well aware of the fact that the scientific world claims there is nothing in a perfect state of rest. Regardless of what they have fixed in their minds we positively know that all things are, to a greater or less degree, in a state of rest or sleep. If this were not true, how could we place temper in steel and keep it there? Every mechanic knows that steel properly prepared to take on and maintain perfect record and character, is susceptible to any state of vibratory activity under heat waves and when suddenly plunged into cold water, or in other words suddenly put to sleep, it locks up its wave motions and keeps them permanently. A mechanic also knows that temper in steel is solidified waves, and that they can be made very short or be drawn out to any length, and that the length of the wave records in the steel determines its relative toughness, and that it runs down over the seven colors from a white through light straw color to brown and blue.

When a child I was told that a revolving shaft or a locomotive tire would crystallize in time because made up of constant whirling molecules that had polar activity. That the molecules of the iron would always point north and south no matter how fast the iron itself was made to turn. That because of the movement of these molecules to keep in range with the earth's poles caused the iron

to crystalize, and that they had to be subjected to heat in order to restore them to their original harmonious and tenacious position again. We find this is not the reason that iron is crystalized, but that the fact is the reverse.

Iron becomes crystalized when it is disturbed from its state of rest—its state of sleep. It is not because it revolves, but because of the constant vibration. Its constant state of activity breaks up its record and disorganizes it to a state of crystallization. It must now be reheated and restored to its normal state of rest, for it is in the fact of its resistance to change that gives it the value for what it is used. Leaving the metal question at this point, we wish to call your attention to another phase of the sleep state, as found in vegetable life.

Energy working its way through vegetable life constructs carbon and carbon is found to be very closely allied to the sleep state, so much so that it requires great heat to break it up. When carbon is thoroughly refined it requires more and more heat to melt it. If we should continue the process we come to a point where it is difficult to break down or change. The diamond is probably the deepest point that energy passing through the vegetable kingdom is susceptible. We admire the diamond as the sleep state of vegetable activity.

Where nature has been instrumental in suspending energy through the vegetable lines to the diamond, we are mindful of the process in the elements of its construction, for we are always enabled to note that the greater duration of Time that is consumed; in other words the slower the process the closer it adheres to the sleep state, and in like measure offers the greater amount of resistance to change. In the case of the artificial diamond, it looks like the natural with the element of Time lack-

ing. The evidence is that Time in the sleep state, even though a blank, has a constant tendency to deepen the state of sleep by the process making it more and more enduring.

Everything is in motion but not as to itself. Strictly speaking, everything is in motion relative to most other things. For illustration, a ship is in motion relative to the water, the world and universe, but not relative to itself or it would not long remain a ship.

Everything that comes into existence has moved into being out of its nucleus center, and everything bears its own record of movement and character; thus everything is in the record and image of its own creator—creation.

Record and character is always in the sleep state. If record or character changed it would no longer be record or character. The sleep part of a thing is the soul of the thing.

The seed is a focal junction joining one generation to the next. It is focal because it is a point at which the male and female dual lines merge. Seed is the sleep state of record and character it represents, brought out of surplus energy and condensed into silent intensity. It is potential qualification ready to express. When placed in darkness and stimulated it awakens to a state of action again. This process goes on constantly in its work of maintaining and reconstructing the physical body, as well as having started it.

In the process of regenerating life, we note how important it is to resort to the sleep state. The successful hatching of an egg depends upon allowing the egg to cool down at intervals that the embryo chick shall have a chance to rest. Truly speaking living is a pendulum in action always swinging between points of rest.

CHAPTER VI.

ASTRONOMICAL SCIENCE.

Astronomical Science is the most perfect of all the known sciences. It is the aristocracy of all sciences, yet there is much more to be learned, much more to be accounted for.

Astronomical calculations give us undisputed measurements of planets, their distance from the central Sun, their distance from each other, the speed at which they each rotate on their axes as well as the speed and distance each travel as they revolve around the Sun. And this is done with such precision and accuracy as to enable the calculators to tell years ahead where each planet will be, when they shall cross in conjunction one with the other, and in a like measure of accuracy tell when an eclipse will occur and where the shadow will appear and where it will make its transit, to the exact place and to the exact moment it will occur, as well as to the elapsed time of the occurrence.

To the Astronomical Scientists we humbly bow in reverence for the wonderful truths they have given the world.

The statements we make relative to the size of planets, their number and distance from each other, are obtained by reference to the various works on astronomical science, wherein they all practically agree. The work they have done and the amount of success they have accomplished is of untold value to us in our work. The discoveries they have made in viewing the heavens and the unerring results that by mathematical calculations they have attained, should be placed, not as a theory, but

in the category of exact science. Therefore we head this chapter "Astronomical Science."

In the various works on astronomy, of which there are nine or more, aside from direct observations and true mathematical conclusions and subsequent proofs, the best they offer are theories, which they later abandon giving assent to new theories, as they are advanced.

We think one of the drawbacks to astronomical work has been that so much of it was done without the proper application of mechanical law, for had the extended effort been made, not upon the application of theory but upon actual test and with an understanding of the laws of motion, it would have found its way to facts instead of theories.

Our efforts will be to apply the laws of motion to facts already attained, and by an analyzation of the theories in the light of the laws applied, determine and extend these theories into actuality or eliminate them for lack of premises.

It is conceded by all astronomers, whose deductions are entitled to bear that name, that suns and planets came into existence through a nebulous process. But from that point they offer several different theories as to the formation of astronomical systems. When the application of mechanical law is understood and applied, it at once rejects a theory not in conformity therewith, which the reader will recognize as we pass along.

The leading scientists agree that the Sun gives off its heat and light by gradual shrinkage in size and that its present bulk will be sufficient to maintain Heat and Light for twenty million years. That it revolves on its axis because of its once having started by a nebulous vortex, which set up a revolution as the nebular mass

approached its center of motion, and separated into rings at various distances out from the center on account of the inability of the outer rings to keep up with the inner rings because of the greater distance the outer rings must travel, each ring like that of the center, or parent ring, rolls itself up into an independent unit, and produces in like manner satellites or moons that revolve around them, and these planets including the central Sun having once come into motion in their formation, ever continue to move without ceasing. It is upon these questions that we wish to draw your attention and at the same time set up a system of our own conclusion. In the first place, we wish to state that the movements outlined in the nebular process are according to mechanical law, but when we confront the fact that planets revolve in the direction they rotate, we have a new thought to consider. Since it is pointed out that outer rings revolve slower than the inner, on account of the greater distance to travel, it also logically follows that the outer portion of a ring of a flexible mass would travel slower than the inner edge of the ring, so that where a planet rolls up out of a nebulous ring the inside would travel faster around the common center and roll the planet in an opposite direction to the way it revolves. But this movement the planets do not take; in fact, they rotate opposite to what such a formation would produce.

It is conceded that all space is filled with Ether and that the planets float in Ether, but if Ether does not itself move there would be a continued resistance which would constantly reduce the movements of planets to a final standstill, and this is the principle that embraces facts that we cannot overlook.

In regard to the shrinking of the Sun, being the

source of continued Heat and Light, we must agree that Heat passing off from a body will shrink it, but that a shrinking body on that account will not give rise to incandescent heat. Therefore, we need give our reasons why planets revolve; why they rotate in the same direction that they revolve; why each planet rotates on its own and different time from that of every other; why the Sun gives off its Heat and Light; and why it rotates on its axis; how Heat and Light is reproduced and the part Light plays in protecting planets as well as maintaining their respective distances in space, and how Light performs its part in rotating planets on their axes.

WHAT IS A SOLAR SYSTEM?

A Solar System is a Sun with its group of planets revolving around it. All fixed stars are Suns and there are at least 130,000,000 Suns and Solar Systems, some of which are much older and larger than our own, within the reach of our telescopes.

A Sun is always the center of a system and it revolves on its axis in the same direction as the planets within that system.

All planets in our solar system revolve on a plane in line with the equator of the Sun, and vibrate endwise and about two per cent elliptical. Each planet has its own path or orbit to revolve and rotate in, and all planets from our Earth outward have from one to eight moons that revolve around them in the direction the planets rotate.

SIZE AND MOTION OF OUR SUN AND PLANETS.

The Sun is 866,000 miles in diameter. Revolves upon its axis from west to east in 25 to 28 days. Its surface travel is about 4,500 miles per hour.

MERCURY.

Mercury is the first planet out from the Sun, a distance of 36,000,000 miles. Is 3,000 miles in diameter and revolves from west to east around the Sun in 88 days and on its axis in the same direction every 24 hours and 5 minutes.

VENUS.

Venus is the second planet out from the Sun, a distance of 67,000,000 miles. It is 7,600 miles in diameter and revolves around the Sun from west to east in 224 days and on its axis in the same direction every 23 hours and 16 minutes.

EARTH.

Earth is the third planet in order, and is out from the Sun 93,000,000 miles. Is 8,000 miles in diameter and revolves from west to east around the Sun in 365 1-4 days and rotates on its axis in the same direction in 23 hours and 56 minutes. It has a moon which stands out from the Earth 240,000 miles that revolves around it in about 28 days. The moon does not rotate upon its axis but remains fixed, one side always towards the earth and in its trip around the earth has its center of motion about 15,000 miles outside the surface of the earth nearest the moon. The moon falls back of the rotation of the earth 23 hours and 10 minutes per day on account of the greater distance it has to travel.

MARS.

Mars is the fourth planet out from the Sun, a distance of 141,000,000 miles. It is 4,200 miles in diameter. Revolves around the Sun from west to east in 687 days and rotates on its axis in same direction every 24 hours and 16 minutes. Mars has two moons.

ASTEROIDS.

The Asteroids are a group of small planets ranging from 228 miles in diameter down to that of invisible objects. They constitute a broken ring which in all probability failed to roll up into a planet with moons. The Asteroids lay out from the Sun 250,000,000 miles and make their revolution around the Sun from west to east in about $5\frac{1}{2}$ years. The Asteroids represent that Nature has its failures or accidents as against many successes. Being one out of the nine rings that failed to roll up into a planet.

JUPITER.

Jupiter is the sixth planet in order and is out from the Sun a distance of 480,000,000 miles. It is 86,000 miles in diameter and revolves around the Sun from west to east in 12 years and rotates on its axis in the same direction every 9 hours and 45 minutes. Jupiter has four moons.

SATURN.

Saturn is the seventh planet in order and is out from the Sun 882,000,000 miles. It is 70,000 miles in diameter and revolves around the Sun from west to east in $29\frac{1}{2}$ years and rotates on its axis in the same direction every 10 hours and 14 minutes. Saturn has two rings around it and eight moons.

URANUS.

Uranus is the eighth planet in order and is out from the Sun a distance of 1,750,000,000 miles. It is 32,000 miles in diameter and revolves around the Sun from west to east in 84 years. On account of its enormous distance its rotation has not been ascertained. Uranus has four moons.

NEPTUNE.

Neptune is the ninth planet in order out from the Sun and is at the enormous distance of two billion seven hundred and fifty millions of miles. Like Uranus its distance away from us is so great that the direction of its rotation is not as yet ascertained. It is 35,000 miles in diameter, it has one moon and takes 165 of our years to make its revolution around the Sun.

TABLE OF PLANETS OF OUR SOLAR SYSTEM.

Sun, 866,000 miles in diameter, rotates on its axis in 25 to 28 days.

Planet	Miles in Diameter	Period of Rotation
Mercury.....	3,000	24 hrs. 5 min.
Venus.....	7,600	23 hrs. 16 min.
Earth.....	8,000	23 hrs. 56 min.
Mars.....	4,200	24 hrs. 37 min.
Asteroids (about 600).....	228
Jupiter.....	86,000	9 hrs. 45 min.
Saturn.....	70,000	10 hrs. 14 min.
Uranus.....	32,000
Neptune.....	35,000

Planet	Distance from Sun	No. of Moons	Period of Revolution
Mercury.....	36,000,000	..	88 days
Venus.....	67,000,000	..	224 days
Earth.....	93,000,000	1	365¼ days
Mars.....	141,000,000	2	687 days
Asteroids.....	250,000,000	..	5½ years
Jupiter.....	480,000,000	4	12 years
Saturn.....	882,000,000	8	29½ years
Uranus.....	1,750,000,000	4	84 years
Neptune.....	2,750,000,000	1	165 years

CHAPTER VII.

THE NEW ASTRONOMY.

A SYSTEM IN ACCORD WITH MECHANICAL LAWS.

A MECHANICAL SYSTEM—WHAT ARE SUN SPOTS— SHOOTING STARS OR METEORS—COMETS.

A thing coming into being must do so from a point of start and in a process of gradual development, which means from a point of exceeding minuteness. The process of development therefore is from an infinitesimal point toward outer space—a circumference.

Something cannot be produced from nothing, and in order to have production there must be a cosmic source. What we are constrained to accept as a Thing, is Matter, and Matter is expended Energy.

The constructive process of Matter is to build from a minute point to which Energy centers and from that point outward. And this is just what takes place in the process of construction of all forms of Matter wherever found.

Energy suspending upon a common center constructs a thing of Matter, and while the development proceeds, we most naturally conclude that the Energy giving it existence is still supplying it from without to the within. If it maintains motion it must do so at the expenditure of Energy, and hence the force that creates a thing maintains its motion thereafter.

Substance of whatsoever kind must be constructed from a force expended, while force must depend upon

leverage principles, within the Laws of Nature behind it. This fact we have endeavored to analyze under the chapter on "Source of Cosmic Energy."

Matter is a combination, that always bears records of past movements and environments with its own peculiar character.

In the inorganic and baser stage Matter could have little or no character. But when it has gone over repeated stages it takes on extended character because of the invisible movement and environment records of its past. It does not matter what stage of character the combination attains, it must go through the one and same process necessary to material construction, which accords with the Laws of motion. So we repeat: Matter is constructed from suspending Energy from without to the within, and that matter is from a center and takes on form as it extends outward.

What we really see of creation is the sleep state of it, an exceedingly small portion compared to that which we cannot see; and when that state of existence comes into manifestation, like all others, it is bound to follow the process of fundamental principles.

In order for a thing of substance to express being, it must be by concentration and condensation, which is for the forces to inwind toward a selected center, where the inwinding causes a nucleus to be established—as that center of motion.

The law of Affinity, or its feminine side, Gravity, existed before the nucleus, or else no nucleus could have been established.

Each grain of sand has within it its measure of the unlimited and omnipresent Law's embrace. And each grain of sand added to the nucleus extends its equal

measure of expressing the further force of gravity. So that when a center is once established it becomes a magnet center to further draw supply from without, which increases the attraction as it increases in size, and thereby becomes an agent of its own construction with a compound capacity of further and further extension and larger capacity. Each thing therefore is possessed with the principle of perpetual motion, with perpetual increasing propensities.

The astronomical teachers have practically all agreed that planets are formed by a nebulous process, which is to say that star dust accumulating in space produced a condition where it took on a specific center, and as the Law of gravity existed everywhere throughout endless space, any point where there should be congregated a considerable quantity of this star dust would have the effect of establishing a gravity center and attract the surrounding star dust particles toward that center. This centering established an inwhirling motion, and when once started forever thereafter continued. That the inwinding particles, because of the increased expression of gravity, extended farther into space as its central body accumulated by the influx of star dust and its increased central pressure, together with the friction caused by the pressure and the winding together of the particles of star dust, created intense heat. Thus a sun came into existence. A glowing ball of fiery liquid matter.

The astronomical scientists agree that the universe has untold millions of suns, some of which are larger than that of our sun, and that there are no less than 130,000,000 of them within the range of our telescopes; and an incomprehensible number outside the range of our vision.

They not only set up this seemingly plausible theory, but have photographed the heavens and discovered that there are more than one just such nebulous formation going on at the present time, as set forth in the preceeding paragraphs.

Up to this point we can fully agree with their hypothesis. What they teach outside of that contains theories we cannot endorse as having the support of the Natural Law.

There are several theories offered to the world how planets other than the suns came into existence. We will briefly explain a few of the theories approved by the world for at least two centuries.

One theory is that when a sun grows to considerable size the influx of nebula sets up such a tremendous whirl of the central body of the sun that it throws off into space a small portion of itself, which portion rounds up into a ball or globe and being hot, like the sun, remains hot and shines out a minature sun for ages until it cools down, forming a crust upon its surface, and thereafter becomes an opaque globe. That on the account of centrifugal force it was at first pitched out into space until the force throwing it out became expended, whereupon it came to a counter-balance with the attraction of the sun and could go no farther out, but in its counter-balanced state it kept on moving and rotating, and as it could get no farther it maintained its motion around the sun in an elliptical circle, swinging to and fro, first with a great variation, which became less and less until it now revolves in nearly a perfect circle. In the case of our earth this variation is about two per cent out of a perfect circle.

When the sun grew larger it again set up its intense

whirl and pitched out another segment. The first portion pitched off gave us Neptune, which flew out 2,750,000,000 miles. The second discharge gave us the planet Uranus, which flew out 1,750,000,000 miles, and there took up its circle around the sun, and the process of inwinding nebula continued until the planet Saturn was thrown off. Then following that, Jupiter, and later the Asteroids. Then Mars, our Earth, Venus, and lastly Mercury.

It is assumed that nebula rolling into a center formed our Sun which, on account of its accumulated pressure and friction, became a molten globe of fire. And so intense was its whirling and heat that it has kept on whirling and will remain hot for 20,000,000 of years to come.

The inwhirling of nebula would produce a pressure as the Law of gravity became expressed, and its turmoil would cause friction and heat, just as this same Law gives expression now. The questions are: How could friction cause such intense heat and how could motion be maintained unless the agencies that gave them expression are still in operation? The astronomical theory set out above, claims that the heat is dying down and that the sun will become a dead and cold body some time within 20,000,000 years.

The sun in fact is not acting upon its initiative, not cooling off nor ceasing its speed of rotation, and it never will. This is the first statement ever made, so far as we know, that claims perpetual and endless resources for our central sun, and we can prove what we say by Nature's Laws.

We deny the theory that the sun gave birth to the planets around it by throwing off parts of itself on ac-

count of its own intense revolution. First, because the propelling force is from without and not from within. It is not like the water being thrown off from a grindstone that is driven by a crank attached to its center, but must be revolved from an outside nebulous pressure that has a tendency to hold it toward its center in proportion to the inwhirl and the law of gravity drawing it in.

The Laws of motion provide centrifugal force, and if the inertia is great enough it will throw a portion of its body out into space. But this is never done unless the motion is sufficient to overcome gravity, and this cannot take place unless the energy is supplied from the central body. The nebulous inpouring would increase gravity as the body grew, and this fact would maintain the body intact no matter how large it grew. But it is speaking without thought to say an inflow will furnish motion enough to overcome gravity and pitch a portion of a planet body into space 2,750,000,000 miles! For the reason that gravity draws in the nebula and the indrawing rotates the body in line with the nebulous flow, and as the added bulk increases the force of gravity, it increases its capacity to hold, rather than to throw off.

There is such a thing as working on the hydraulic ram process, where a large waste can center its force upon a small portion and outbalance it, in the manner that a big ball can raise a small ball from the short end of a lever, thus throwing the small ball high. But there is no such process expressed when a chunk of a planet is supposed to be thrown off from an equator of a globe whose supply is presumed to come in by way of its equator.

Then again we must consider the speed that is re-

quired of the sun's surface in order to pitch Neptune out of its own body $2\frac{3}{4}$ billions of miles, and keep Neptune still traveling at the rate of $19\frac{1}{2}$ miles per second, while we must also consider that Neptune, unless it is supplied by some other force, must have slackened down its speed somewhat in the millions of years it has been moving since its birth.

The sun's surface speed at this time is reputed to be 4,500 miles per hour. The evidence is therefore that in order to maintain that rotation speed it must be supplied with an influx energy equal to its speed at least. This much it has, and there is no reason to believe it has more. If there was a time when nebula rolled it faster, it must have been under different influences than that expressed by Natural Laws as we know them. For the influx could in no wise be in excess of the gravity taking it into the center, and the gravity drawing a planet together would certainly not release it at certain times to be pitched off, when it is especially considered that the influx and rotary motion is caused by gravity itself, which would resist any part being thrown off.

While considering the force of gravity, let us compare that of our earth with the sun. The sun is conceded to be 100 times larger in diameter than the earth, therefore everything else being equal, a man weighing 150 pounds on the earth's surface would weigh 100 times as much, or 15,000 pounds, upon the sun's surface, but the difference of surface speed would contribute to a different centrifugal force. On the earth's surface the travel is 1,000 miles per hour and on the sun's 4,500 miles per hour, which would mean $4\frac{1}{2}$ times more centrifugal force on the sun than on the earth. We will then have to deduct the $4\frac{1}{2}$ times centrifugal force

that the sun supplies over that of the earth, and this will reduce the weight of the 150 pound man to 1,666 pounds. This will give you an idea of the tremendous speed the sun must rotate in order for that body to create centrifugal force sufficient to overcome its gravity and send a chunk like Neptune, 35,000 miles in diameter, a distance of $2\frac{3}{4}$ billions of miles and keep it in motion all the enormous ages since the event was supposed to have occurred.

One other suggestion is offered as proof that planets were pitched out of the sun in birth by the above mentioned pitched-out theory, is that the planets revolving around the sun do so on an elliptical circle, which indicates that when they flew on their tangent and spent their momentum in a direct line from the sun, that, having lost the centrifugal force, were caught up by planetary attraction and held firmly against going any farther. That the new born planet would then take up its course around the sun, rocking out and in on the orbital line established by the force of its detachment. First at an enormous variation but as time rolled on came nearer and nearer to a perfect circle; until now it lacks but two per cent of a perfect circle.

The argument concerning the elliptical circle has reason in it, but to say that centrifugal force can throw off a planet from the Sun, against the force of gravity, and that after it gets out $2\frac{3}{4}$ billions of miles, gravity suddenly calls a halt to it, has no weight in view of the fact that gravity is greatest when bodies are closest together, and lessens as they get farther and farther apart; which we know to be true in the case of the attraction of our Moon exceeding that of the Sun, which is 400 times the smaller body in diameter. The truth is that what we

know of gravity and centrifugal motion contradicts the theory in every way.

In addition we are to believe that Neptune was pitched out $2\frac{3}{4}$ billions of miles on a straight line which, when force was spent, took up a revolving motion around the Sun.

We are also not to overlook the fact that all the planets revolve around the sun, in the same direction as that of the sun itself, and for want of a better term we call it from west to east. And on account of the fact that all planets revolve the same direction that the sun rotates, it is *prima facie* evidence that they were pitched off from the sun when it was revolving, and that each planet took the course of the sun from which it was pitched off. But there comes another situation to contemplate, and that is that the planets rotate on their axes in the same way that the sun does. And here came the conflicting evidence, for it is a well known fact that any form pitched off into space by a repellent force, will have its parting effect expressed at its point of separation like two rolling balls, the touching surfaces traveling both in the same line of motion, which would mean that portion longest touching the Sun would move along with it, and the outer portion, which met the greatest space resistance, would lag, giving a retarding inclination to the planet and rotating it oppositely to that of the Sun.

We were inclined to believe the theory sound, but when we considered that the same teachers would have us know that all planets rotate exactly as the sun rotates, our knowledge of mechanical law completely upset the whole proposition. See plate No. 16 wherein the mechanical law of motion is illustrated.

Theories, unless supported by Nature's Laws and fixed

principles, are only speculative at best. They are usually ideas conjectured and hold good only until better ones replace them, or are found to be out of harmony with Nature and rejected.

The next theory offered to the world concerning the birth of planets, other than the suns, is the ring process. The nebular hypothesis for a sun builder has never found serious objections. But the birth of planets shot out from the Sun has not been universally endorsed.

The ring idea is no doubt the most popular, but up to the present time is vague. The best evidence that the ring process of forming planets outside of the Sun is in the fact that there are two rings around Saturn now.

The next evidence in support of the ring formation is the well known fact that each planet out from the Sun takes up a proportionate space, according to the distance out. That all the planets revolve around the Sun in the direction that the Sun rotates upon its axis, as would be the case were each ring set within line of the Sun's equator, they would naturally revolve in a grand disc around the Sun. The theory is that in the formation of the Sun the inwhirling nebula would set the central body in motion, and that the center, having but a short distance to make in its rotation, could make the revolution in much less time than the surrounding nebula flowing into it. And since the outer edge of the disc would have the greater distance to travel, would lag behind, and in time separate from the inner portion, dividing the disc first into two rings. Then as the disc again enlarged, it would separate into another ring, until the process reached to the planet Neptune, or the ninth ring out from the Sun that formed Neptune.

It was discovered that all the planets traveled around

the Sun at about the same speed, and that the first one out from the Sun made its revolution in 88 days, the next in 224 days, the next in 365 days, the next in 687 days, the next in $5\frac{1}{2}$ years, the next 12 years, the next $29\frac{1}{2}$ years, the next 84 years, and the next 165 years, and as they were all traveling at the same speed, about $19\frac{1}{2}$ miles per second, they could not get away from the idea of a ring system.

Each ring was supposed to roll up its own planet, as would naturally result by the friction caused by the lag of each outer ring over the disc edge of the ring next within, and in monstrous roller fashion, rolled each ring into planets of its own.

Where the disc ring space was wide enough, it not only would roll up planets, but because of the great distance, have upon its outer rim a lagging portion that would separate from its center, and like that of the Sun, roll up minor planets called moons.

This is supposed to have missed on the two first rings out from the Sun, because of the smallness of the rings, making it possible for the planets Mercury and Venus to roll up into globes of rings which found a way into the globe, leaving nothing outside with which to construct a moon. Hence Mercury and Venus have no moons.

In the case of the Earth it had one outer ring, and that produced our moon. Mars had two outer rings and produced two moons. In the case of the Asteroids, the theory is that the planet exploded and revolves as a ring composed of 600 or more fragments all the way from 228 miles in diameter down to invisible objects. Jupiter had four outer rings, and has four moons. Saturn had ten outer rings, and has eight moons and two rings left

over. Uranus had four outer rings and has four moons. Neptune had one outer ring and has one moon.

All this theory of ring formation seems to hold good, except for the fact that it lacks the solution as to how it is possible for the rings to roll into planets, and when completed found to rotate upon their axes in a directly opposite way to which the rings were supposed to have rolled them up. For it is well known that the outer edge of a ring disc is the part that would lag behind the inner edge, and in doing so, be bound to roll the globe with its disc, with the inside traveling fastest, compelling the forming planet to rotate exactly opposite to that of the Sun, the reverse of what it now does.

By reference to cut No. 16 it will be seen just what occurs when one plane moves over another. Mechanical law pronounced the doom of this seemingly plausible theory, and the astronomers set out to establish another, which in a brief way we will explain.

It is now presumed that all planets are separately formed, just like the nebulous process producing the Sun, and that when such formations took place each planet became a sort of whirling tramp passing through space. That when a planet like our great Sun came along, it would pick up the little planets, one at a time, and carry them along with itself forming a great solar system. That the planets were held off from the Sun by the immense speed they had when they passed each other. That the little fellow would be drawn toward the larger one, and set at such a whirling motion around the central Sun that it was forever kept out from the Sun by the centrifugal motion. That the elliptical motion that the planets make in their course around the Sun was due to

being suddenly jerked in and have not completely recovered the process of vibrating while they make their revolutions around the Sun. That if our Sun should happen to pass another Sun, which by the way had chanced to pick up a planet or more, and the whole of them were not too large, the Sun would also take the little Sun in with its planets and all.

In this way the Sun picked up Mercury, then Venus, and when it came in proximity of the earth and its satellite, the moon, picked them both up. When it came to Mars and its two satellites, it picked them up. How it got hold of the Asteroids is not clear, unless it was that that planet bursted in the catching. When it came to Jupiter and its four satellites, it picked them up. Saturn with its eight moons and two rings were picked up, but why and where Saturn got its rings was a mystery to this adoption theory. When it came along to Uranus and its four satellites they too were picked up. Neptune and its one satellite got picked up, and the Sun is still carrying along these nine family systems. Because of the rotation of the Sun it had the influence to set the whole solar system in motion along the line of the equator of the Sun, and held them all together, with each of their satellites, all revolving around them in the same equatorial line as that of the Sun with but a slight incline out of the regular.

The theory that suns formed in space, traveled and picked up other planets by attraction in their course of travel, has some merit to it, but it is theory, pure and simple. The rings of Saturn could not be explained away as a living testimony of the ring system. Then there was that deepest of all mysteries that all planets rotate around the Sun with the outside traveling fastest,

and each that had one or more satellites had these satellites revolving around them in the same way the Sun rotates, which was directly opposite to what should have been to support the theories advanced. And right here the scientific world will be stranded until it applies the invisible forces deduced from the movement of the planets themselves.

There is one other theory being advanced that can hardly be placed in line as scientific, yet it has many endorsers. It is exactly the opposite to any other idea advanced, and is called "Cellular Cosmogony." The first idea it embraces is that everything is constructed of cells and hence cell process must be a true system. But the cell process is a misnomer. There is no such system. What are called cells are not cells at all, but solids—molecules—so that destroys the cell process as evidence supporting a system.

The author of Cellular Cosmogony would have us believe that the universe is a hollow globe, and we are living inside of it. That the Sun, stars, and all else in the universe, is within this hollow globe. That it is surrounded, not by space, but by an endless and bottomless solid. That the universe, instead of being made up of planets floating in endless space is all within this enormous hollow space, and within this hollow constitutes all the space ever created.

It is really astonishing how much argument is set up to prove the hollow globe theory, and the authors believe that they have actually annihilated every other system offered to the world, even space itself. It would be a waste of time to even mention it here were it not for the fact that so many otherwise intelligent people adhere to the idea. Strange as it may seem, the author himself

was forced to get outside his own idea to represent it. Every effort at description would contradict itself. If we have a hollow globe, then we must have a hollow Sun to give us light, all the stars and planets within this globe must also be hollow, and shine only from the inside. If we wanted to make a map or a globe representing our hollow earth we would have to get inside of it to see it for the system is a cellular system, and we cannot have anything else but cells, if we stick to the principle.

We have given what we consider a brief outline of the most popular ideas on astronomy. Have undertaken to explain points where the theories have met with supposedly imponderable questions. There is no desire on our part to dispute the well founded facts of discovery, or in any way question what the scientific world has fully agreed upon, for in their analysis the work accomplished is marvelous in the extreme. The work of the astronomers is like apples of gold. Its value to man is immeasurable. We have no dispute with them in established truths. Our sole aim is to supplement their findings with the application of mechanical law upon questions in which they have not agreed—in fact cannot agree, because their conclusions contradict the theories they advocate.

Therefore we plead with these men of science and the thinking world to reason with us as we offer our humble efforts in illustrating an astronomical system supported by Nature's invisible forces working under mechanical law.

A MECHANICAL SYSTEM.

Endless space is filled with Ether—nebulous matter. Gases and planets float in it.

Ether is itself a material substance, although finer than air. It is enormously elastic and compressible and exceedingly flexible.

Looking at our universe from the Ether standpoint there is no vacant space. Solidified matter does not occupy one-millionth part of ether, hence the visible part is infinitesimally small compared to the invisible.

Great and stupendous as the suns and planets seem to us, comparing the universe as a whole, they are mere dust specks.

Ether fills all space, but no part of it is outside of the embrace of Nature's invisible forces. Endless space is filled with motion and motion is Life.

We have whirlpools in water, whirlwinds in the air and cyclones in ether wherever a tentative vacuum happens to appear.

A vacuum always sets up an inwhirl and its center always creates or condenses a nucleus. The law of affinity is everywhere present to express its gravitating effect upon condensing Energy and Matter, giving extended expression as it becomes more and more solidified.

Ether, exceedingly fine and flexible as it is, has weight, that is to say it is effected by central gravity, and susceptible to motion, inertia and momentum, as we shall see and be able to prove beyond any question of doubt.

Ether being susceptible to the laws of Nature over which it is embraced, yields to the multiple and geometrical leverage principles and becomes the virgin soil of invisible Energy.

Energy in action occupies more space than Energy suspended. Energy in action is under the ceaseless grip of the law of gravity, and as Energy suspends, it becomes more and more subject to the gravitating attrac-

tion. Just as compressed air is heavier than thin air, suspended or condensed energy is heavier than active. Energy because of its action occupies more space and is thereby integrally thinner than when suspended and condensed.

Energy condensing comes to a common center forming a nucleus, which by virtue of increasing gravity becomes a gravity center, from which it reaches out toward space attracting every plane of matter according to its relative fineness, or coarseness, toward that center. And as the nucleus center is supplied from without, its central attraction forces automatically increase. When that happens an etheric cyclone has taken place. A miniature planet has come into being, that forever revolves upon its nucleus center, because its central gravity once having found a material core to act from, ever and eternally sends out its attracting effect into space for more ether and its suspending Energy, from which it is unceasingly and eternally supplied.

The nucleus or miniature planet has no power within itself to revolve. But the law of affinity expresses a greater amount of intensity on solidified substance than thin Ether, and because that is true the solidified center becomes a general point of attraction. That is just why we are drawn directly toward the center of our earth by its attraction and not away from the earth toward that of thinner substance.

The planet itself does not supply the force but becomes a pivotal point of the law's effect, from which it reaches out into space, drawing ether currents into it. While the inflowing current takes up an inwinding course when striking its central core or planet, it always sets the core in action in line of its inwind. How can

it do this? Why does not the planet resist being turned and what does the inwind use as a base from which it can supply a push without kicking back? Simply this, a circumference is larger than a center. It is six times greater in distance around a circumference than it is from a circumference to a center, and as space is an immovable fixity, the ~~circumstance~~ *periphery* offers a six-to-one leverage resistance, and therefore the planet forever rotates upon its axis with five unit constant surplus advantage.

In addition to the leverage advantage space offers to a smaller resisting center, we find another invisible force at work, namely, gravity, which has a constant pull upon all matter, ether included, with increasing force as matter becomes more solidified. Hence it pulls harder on condensing ether than it does upon the finer ether farther out, and at the same time the condensing ether whirling inward toward the nucleus core, finds a greater resistance when striking the more solid core center, with the result that it presses an increased rotary motion on the core because of the gravity from a stationary point—the silent center within.

Our sun rotates upon its axis because it is the central core of an etheric cyclone and is compelled to turn the way the ether inflow strikes its surface. It has only 2,598,000 equatorial miles resistance while the ether cyclone rim extends out over six billions of miles, with over eighteen billions of miles of space background to supply its pushing inwind.

The sun therefore will never cease to rotate upon its axis, while it is supplied with this ether inflow, and the ether inflow will never cease so long as the law of affinity exists and its gravitating effects are maintained. And

this will always be the case, as solidified matter has a gravitating effect exceeding that of the finer substances.

It might be asked, why does an inflow take on a whirling motion? There are several reasons, among which are, first, when condensing substance drifts toward a vacuum center, if particles should meet on perfect centers they would rebound. If they should miss perfect centers they will take either to one side or the other. It is impossible for two objects to pass each other without forming a circle—both revolving the same way. If they pass at the right of each other they will revolve to the left. If to the left, they will revolve to the right, and it has only to start one way or the other and the inflow will keep it going. Second, because anything that rolls its core enables the inflow to wrap itself up harmoniously and smoothly without jumbling. Third, it requires less than one-third resistance to wind in that it does to drive straight in.

In drawing water out of a vessel through a small orifice, the opening will be found to become a center around which the water will soon begin to whirl. Condensing Energy or any fluent substance will whirl around the condensing center. A storm sweeping a wide track will travel in a straight line. This we call a hurricane. A storm traveling in a narrow track will whirl either to the right or left. When it travels in a whirling manner, we call it a cyclone.

If the outer edges of a cyclone, say one-quarter mile wide, has an inwhirling tendency of a feather's weight it will multiply its force on the center as would a lever one eighth of a mile long on a central fulcrum intensify its power.

A cyclone picks up everything that is loose within its

path, draws it into its center and carries it along. If it occurs on the sea it picks up the water into a great central spout, presses it high into the air where it spills out over its whirling disc and falls in showers over its path.

Substance condensed into a center by a great cyclone disc when the force is sufficient to produce friction will produce heat. Energy pouring into heat will produce matter just as matter pressed through or over a bridge of fire will produce energy. An inwinding action produced primarily by a gravitating or magnetic force is called feminine or afferent energy. A force crossing a nucleus center does so because it is made to cross focus lines, and when the influx pressure is great it causes friction that generates efferent force, which passes outward toward space in every direction, particularly in line of the equator of the revolving core it has been generated through. And as space offers little resistance to high energized substance, it always passes out in straight lines until its momentum has been spent in diversity of space.

Every etheric cyclone in open space takes on the form of a disc. It cannot do otherwise for it cannot revolve two ways at once. So long as it is a simple disc having only a condensed core of its own substance, it could not be the means of producing a globe until the central core became a melting heat. Then when etheric substance becomes melted into liquid, which is the next one of the four grand physical planes below it, central gravity becomes specific, rounds it up into a globe and the globe rotates within the disc as Saturn rotates within its rings. Being liquid it extends toward its equator and flattens at its poles, according to the velocity of the movement

it is forced by the surrounding ether ring disc to make, and the effect of centrifugal force, according to the travel of its equatorial surface. If the ether influx becomes intensified, as it is bound to do when the central globe becomes a fiery consuming arc, the intensified influx will so increase its pressure upon the equator as to counterbalance its centrifugal force, and the globe will round itself up into a symmetrical ball, just as it does in the case of our grand central Sun.

Were it not for the fact that our Sun is surrounded by an ether cyclone whose influx presses upon the Sun's equator at not less than 22,200 pounds to the square inch, the equator of the Sun traveling 4,500 miles per hour would flatten at its poles and round out at its equator like a grindstone. (See Plate No. 17.) Because it is a mass of molten liquid beyond 18,000 degrees of heat, its energizing force is 500 times greater than our electrical arc lights.

The scientific world is well aware of the rotation of the Sun, and that as a molten ball it would take on the form we suggest above, were it not for its equatorial or disc influx pressure, so they meet this fact and account for the symmetrical roundness of the Sun to a claim that it is a cold solid ball covered with a light and heat producing corona some one hundred and fifty thousand miles in thickness. That within this brilliant atmosphere is the solid black globe, which they claim can be seen only when rents called sun spots appear in the atmospheric envelope.

It is a well known fact that an atmosphere 500 times more brilliant than an arc light would be sufficient to illuminate any blackness showing from its background, to say nothing about anything remaining cold and black,

when encased for billions of years beneath a flaming atmosphere of 18,000 degrees of heat. Sun spots do occur, but there is a reasonable explanation for their appearance. What they are and why they appear will be treated under the heading of "What Are Sun Spots?"

There is a great difference between heat and light, and yet the two expressions of energy co-operate in many instances. In dealing with the question of the sun light and heat, we must consider the different phases. Heat is a slow moving energy. It is confined closely to its generating centers. Heat, however, will pass through substance that light cannot. A substance that light cannot penetrate is called opaque. If light can pass through it, we call it transparent.

While heat can penetrate what light cannot, light energy is so much finer in quality that it moves with a speed over space of 186,300 miles per second. What now have we to conclude? It is this: that light and heat are close associates with extremely different characters. The one slow of action—the other quick. And aside from character, they both have dimensional functions. Heat energy operates in the third dimension—that is it takes on bulk formation—while light energy moves in first dimensional lines, that travel at enormous speed. Light energy carries neither heat nor light, but when arrested in its flight, the resistance it meets is converted into a reproduction of its original character—Light and Heat.

In the first place ether inflow is brought about by the Law of Affinity, the negative side of which is called gravity. Ether passing into the nucleus of the Sun is condensed or consumed. In a way we could call it digested, for that is just what takes place. When Ether is

consumed a portion of it is transposed to matter, becomes a portion of the Sun, and the remainder is transposed to Efferent Energy. As by extracting the finer of any substance, the grosser remains.

The light energy passes out into space over first dimensional lines until it completely diversifies in space, or is caught up by other planets, and consumed into energization in the process of constructing character forms, in vegetable and animal life. The heat remaining within the Sun perpetuates its qualities in maintaining the 18,000 degrees it has in store as against the 240 degrees below zero temperature surrounding it, while that portion failing to pass the focal center, into that of light energy, expresses itself into heat energy that cools into the liquified body of the sun itself.

Presuming the equilibrium standard of heat to be 18,000 degrees, the constant inflow as a source of supply would increase it were it not for the fact that the ether pouring in was a frigid cold. In other words the constant generation of heat is being constantly condensed by its chilly surrounding environment, and heat condensed becomes liquid matter. Therefore the cooling process of the Sun does not shrink it in size but, like gravity, the negative side of the Law of Affinity, cold becomes the negative side of heat energy, and becomes the constructive side of the liquid matter which is eternally constructing the Sun.

When the central body of the Sun becomes larger, its gravitating influence extends farther and farther into space, encouraging a farther and farther extension of its Ether cyclonic disc. There comes a time when the central globe rotates at a counter-balance with the inwinding push of a given circumscribed circumference. It

needs no further extension into space for a leverage from which to push, and travels at a faster speed than the nebulous matter surrounding it can attain. The result is, that the outer edge of the disc will lag and sooner or later separate from the central portion of the disc, like a surrounding disc ring, giving the appearance that the remaining central globe rotates independently from the surrounding disc and that it is driven by a force from within.

What really takes place is the establishment of gravity planes, like that of atmosphere, surrounding our earth. The more condensed a plane substance is the closer it lies to the center, and the less dense, the farther away from a center, which also includes the fact that the thinner the plane the less the resistance. So that when the ether cyclone pours into the general center it readily passes through the outer thinner planes, and finds more and more resistance until it strikes the central core, or liquid plane, where a resistance is offered sufficient to produce a dynamic arc light.

It is therefore plain to be seen why an outer ring can lag and still not affect the propelling current driving the central Sun, or disarrange the perfect working of the system.

When rings lag with the ever and endless supply of ether current passing through them, they must gradually become more and more condensed, and offer a degree more resistance to the inflow. At the same time, rays of light energy pouring out from the Sun in straight lines find a resistance, especially where surfaces appear, and this we know must occur where the planes separate into rings, just as we see the refraction of light bend around our globe with the surfaces of atmospheric layers.

The Sun light energy striking the inner surface of Ether rings tends to retard them, while the Ether cyclone, constantly winding in, rolls the ring up into a disc according to the thickness between the inner and outer edges of the ring established. When this has taken place a new nucleus has been created, a new etheric cyclone is produced, an embryo of a new planet is born. It revolves on its axis in the same direction as the Sun, because the Sun light resistance retards its inner rim, while the general cyclone pushes it along, pressing its course around the Sun at the rate of $19\frac{1}{2}$ miles per second, making the outer rim that must travel farthest travel faster than the inner edge, causing the new-born planet to revolve around the Sun about six times as fast as its equatorial motion of rotation. This fact enables us to determine the line of the general incline of the Ether inflow to the Sun, as that of six to one, which is to say the Ether rolls around the Sun about six times in its inwind, crossing a planet disc ring, or, in other words, at an inclination of seven per cent from right angle to the light rays of the Sun.

The new little cyclone that has come into being, like its parental source, works out its own construction in the same manner and process, and under the influence of the same laws as that which created the central Sun. It had its cyclone influx and its own center to generate heat and condense its heat into a globe of molten liquid, but as its field of operation was confined to the limits of its disc ring, it could not develop as a central Sun, but must become a planet—or satellite of the Sun—for it is already bound by outside limits as to space and is tied to the central Sun with gravity lines of attraction which it cannot sever. The result is it cools down from

a molten liquid to that of liquids and solids. And thus the first ring around the Sun becomes the planet Mercury.

In the meantime the Sun grows in size. The process works on and another ring is formed. This ring, like that of Mercury, becomes condensed, and following the same law as its predecessor, produces another miniature etheric cyclone, then the embryonic planet of Venus is born. It, too, must roll up its disc. The influx must cross its focal center, generating heat, and from the heat condense its molten liquid ball that in ages cool down to the plane of liquids and solids.

Next came the earth ring disc, which had already taken on its form in the Sun's cyclonic disc. It, like its predecessors, had to follow the same process and conform to the operation of the same law, rolling it into a disc of its own.

The center of Mercury's ring disc was 36,000,000 miles out from the Sun. That of Venus was 67,000,000 miles, and that of the earth's ring 93,000,000 miles, which, it must be noted, has much more territory than was taken in by the Mercury or Venus rings. The result was that the Earth's cyclone was more extensive than either that of Mercury or Venus, and in the generation of its liquid center, left sufficient surrounding nebula within its cycle to form another miniature ring about 240,000 miles out from the Earth; which, like the rings around the Sun, became separated from the Earth globe and caused it to become a miniature Sun, to send out its light rays against the surrounding ring while its inrolling Ether disc rolled up the Earth's miniature disc ring into our Moon.

The Earth's Ether cyclone, like that of Mercury and

Venus, was limited to its own Earth disc ring as it revolved around the Sun. Hence its limited supply destined the Earth to become a planet instead of an endless growing Sun. In the meantime the Sun, through billions of ages, grew to the extent of absorbing the Earth's influx disc, while it extended its line of attraction over it and maintained it in its regular revolutionary course around the Sun; rotated it upon its axis in the same manner as the Sun rotates with its outer rim traveling the fastest, for the same reason that was expressed in constructing Mercury and Venus, which was the same rotation it assumed within its own ring.

What else happened? Simply this: as the Earth gradually transposed from a miniature Sun to that of a planet, its etheric cyclone gradually ceased. A crust formed over the surface of the globe; its outer surface was subject to the Sun ray resistance, and the Sun's etheric cyclone still pressing forward, its outer rim compelling it to continue rotation as before, whereupon it become gradually transposed from a Sun to a planet, or in fact became a motor, where before the change it was a dynamo. And for hundreds of millions of years the earth crust has been gradually thickening.

In the change of the Earth from a dynamo to a motor, it must be understood that the planets are not the source of energy, but are the pivotal centers upon which the principle of Nature's Invisible Forces operate. So, when an etheric cyclone ceases to supply energy to a nucleus center, it, in the same measure, ceases to send out light ray energy. The Moon therefore has no direct constant light rays from the earth to retard its inner surface and no cyclone inwind toward the Earth's equa-

tor to rotate it upon its axis. It therefore ceases to rotate, becomes set with the weightiest side of its body toward the Earth, held by the Earth and the Moon's co-joint attraction, and with this attraction is revolved around the Earth, like it did in its source of construction, with the outer edge traveling fastest and at the same rate as that of its original ring, which travels once around, to 28 revolutions of the Earth.

The Earth still revolves upon its axis, takes in an Ether current at its poles and throws it off at the equator. One of which currents winds to the right, the other to the left, depending upon which pole the current enters. And as one current is wound to the right and the other to the left, the outpouring equatorial flow forms an Ether disc, wherein, on account of the different twist, takes on difference of polarity where they swing out side by side and become the sustaining and propelling force of the Moon, as we shall note the effect upon that body as it constantly vibrates north and south, plying from one to the other of these polar differentiated currents.

The Moon to us has the appearance of rising in the east and setting in the west, while in truth it rises in the west and sets in the east once every twenty-eight days.

The Moon, of course, was a satellite of the Earth, and, by the way, a granddaughter of the Sun. The Earth being the center and parental focus of the Moon's creation, was naturally the center and larger body of the two. The Moon, however, before it could possibly be transposed from nebula or condensed energy, must cross the bar of heat, that its heat may afterward condense into liquid, and from a liquid mass into crystallized matter. In order for it to have rounded into a globe,

it must have necessarily rotated. But it does not rotate now. Neither does the earth rotate, strictly speaking, upon its polar centers, because it must reel to the influence of the moon. Were we able to stand out in space and see the invisible line of attraction between the Earth and Moon, we could see two balls whirling around each other with their axis center outside the Earth far enough to equalize them according to bulk. The Moon tide on the ocean is caused by the line of attraction between the planets, and the tide which takes place just opposite the point of attraction of the Moon is caused by the centrifugal force from the actual axis center between the Earth and the Moon (see Plate No. 18). So while we are rotating upon the polar axis of the Earth, we are swinging around the axis of the revolution of the Moon. In this way we are always traveling in a zig-zag course in our revolution around the Sun. One other point we might mention here is the fact that the tie between the Earth and Moon has the effect of delaying rotation of our planet at least forty minutes per day. In other words, if we had no Moon our days would be about 23 hours and 16 minutes long, instead as now 23 hours and 56 minutes.

Passing from the Earth's orbit to that of Mars, the same process prevailed, as that in the construction of the Earth. With the difference that the ring disc out of which Mars was rolled up, was narrower than that of the Earth, but more than twice its circumferential diameter. The miniature etheric cyclone that created Mars rolled into a nucleus with two rings around it, one much farther out than the other, and they had to pass through the same process as that of the Earth. In viewing Mars and her two moons, they give the ap-

pearance of one moon revolving in an opposite direction to that of the other, because of the fact that the inner one makes its revolution about twice as quickly as the outer one, giving the appearance of one having a retrograde motion. And since Mars has two moons of different revolutionary time Mars could not have an axis, even as permanent as that of the Earth and Moon, for Mars would have to yield to the varied parts displayed between two alternating moons, hence give to the planet Mars a double zig-zag movement as it revolves around the Sun.

In the next orbit around the Sun, out beyond Mars, are a series of small planets ranging from 228 miles in diameter down to below telescopic vision. Astronomers are disposed to believe that these small planets, which are called asteroids, are the result of a bursted planet. We have no evidence on which to base that conclusion. The only thing we do know is, that Nature gave to Mars a narrow ring just inside of the asteroids ring, and a very large ring to Jupiter, just outside the orbit of the asteroids. The inference would be, that the orbit of the asteroids was a mere sliver lying between the small planet Mars and the monster planet Jupiter. That there was not marginal width in the asteroid ring disc to roll up into a miniature cyclone to wind up the nebulous matter of that ring orbit, and the result was to form a series of etheric vortices whose nuclei are represented by the 600 odd asteroids.

In the case of the orbit around the Sun, outside the asteroids, there is a disc ring probably three hundred millions of miles wide, and in this ring has been formed the cyclone that wound into one planet the nebulous condensation of that orbit forming that giant planet

Jupiter, which is over eleven times the diameter of our earth, with four rings, which were in their regular order rolled up into moons.

We need not repeat the process, only to say that the Jupiter orbit has been an expression of the same invisible forces that were operative in the minor planets created before it.

There is one thing remarkable about Jupiter, and that is, regardless of its size, it is the most rapid rotating planet within our solar system. Although Jupiter is 29 times larger in diameter than the smallest planet, Mercury, it nevertheless, rotates upon its axis nearly three times to Mercury's once. For Jupiter, 86,000 miles in diameter, rotates on its axis every 9 hours and 45 minutes. While Mercury, only 3,000 miles in diameter, takes 24 hours and 5 minutes. What lesson are we to learn from this fact? It simply proves beyond question, and designates a fact that holds good in the case of Venus, Earth, Mars and Saturn, as well as Jupiter and Mercury, that the force rotating a planet operates externally. That is, it is rotated according to the size of its exposed surface. For the reason a large planet has more surface exposed to the resistant rays of Sun light than a smaller planet, and while each planet is propelled around the Sun in the same cyclonic Ether inflow, they would rotate upon their axes only to the extent the light ray resistance effect would have upon their surfaces exposed to the Sun.

There is only one seeming case of variance, and that is that Venus rotates 40 minutes quicker than the Earth, although it is 400 miles smaller in diameter. But we find Venus has no moon, hence no rotating resistance

to overcome like the enormous pull our Moon has upon the Earth.

In the case of the orbit Saturn, the next disc ring around the Sun outside of Jupiter, we must repeat, came about in the same manner as the planets preceding it. There is a difference, however, in the number of rings it established in its miniature Ether cyclone disc, for Saturn has eight moons, and two rings left over. Taking for granted the ring process of the creation of planets and satellites or moons, and the fact that Saturn had rolled up eight rings into moons, it would have rolled up the remaining two if the forces by which the process was accomplished had not been suspended. The evidence is that the various planets, like that of the central Sun, became each a molten ball of liquid, and as such are miniature suns for a time, offering light resistance by which rings are rolled into moons. The internal heat of Saturn cooled down before the last two rings were rolled up, and they are now left to us in embryo as marvelous records forever.

The planet Saturn is 70,000 miles in diameter, and about 16,000 miles smaller in diameter than Jupiter, which provides it with less surface resistance than Jupiter, and for that reason it takes Saturn 29 minutes longer to rotate than it does Jupiter.

Outside of Saturn is the orbit Uranus with four moons, and then the orbit with Neptune and its one moon. The distance these two planets are away from us their rotation is not yet ascertained. The probability is, they may have several moons that we cannot reach by our telescopes; yet we do know that they are a part of our solar system, that they are a result of the same process and that they revolve around the Sun in the

same equatorial disc and in the same direction that the Sun rotates upon its axis, which serves as indisputable proof that the whole solar system is operated by the one and same invisible force.

The system we have outlined, like every other construction of matter, is builded from the center outward. We know of no exception to this rule.

Not only is everything of material formation builded from a center outward, but everything is supplied by an energizing involving influx from without.

A thing, therefore, in order to grow outward, must be supplied by an inflow in order to construct it.

If a thing moves, it is because it is being moved by an energy greater in supply than is required to simply maintain it, for the law of inertia is omnipresent, and all forms take on states of rest when energy ceases and the force of momentum is consumed by space traversed.

A thing to come into existence expresses energy expended, and action is but expressing energy suspending, and a thing having perpetual motion must have perpetual energy supply.

Our solar system reaches from the Sun out to and beyond Neptune, in all over six billions of miles. The Sun in bulk is many thousands of times larger than the eight planets, twenty moons and six hundred asteroids surrounding it, and is the core to a dynamic etheric cyclone, which is brought about by the Law of Affinity—gravitation—and extended by the same law into planetary attraction.

All space is filled with Ether, and as space is endless, there could scarcely be a case of Ether pressure for the want of space to exist in. But we find Ether on the Earth surface at not less than one hundred pounds

pressure to the square inch. In determining the cause for the Ether pressure we are compelled to admit an inflow pressure. We also know Ether to be subject to current action by rotating magnets, as is done in the magnetic battery. And that it is subject to the law of gravity, as that of air or other substances, within the measure of its relative density.

We can find the pressure of Ether by insulating the core of our dynamos and note that it produces a magnet of about one hundred pounds to the surface square inch when the core is so insulated, which means an Ether pressure on the outside when the Ether is centrifugally drawn off from the inside.

Ether has weight, or in other words, is subject to attraction and momentum. The core and steel armature of a dynamo, when set in motion, throws Ether out at its periphery or equator into the surrounding air, while it draws Ether in at its core poles, because of centrifugal motion, and shows that Ether has a substance, commodity or weight. If there be receiving fields of steel outside of the revolving armature, the current of Ether will be thrown across the air space between the armature and field receiver and be taken up in the latter in compressed formation, equaling in pressure that of the centrifugal force expended, less the resistance offered by the air space between. The Ether pressure accumulating in the field, when turned loose over wires and carbon points, produce what is known as the arc light.

The Ether pressure necessary to produce an arc light of consequence must be at least 100 pounds to the square inch over and above the zero pressure.

The exact Ether pressure can be determined by the

power used to drive the dynamo, or by the power generated at the motor it passes over. It is peculiar, however, to note that Ether pressure can be maintained in a steel wire running up into hundreds of horse power with but very little waste. All this is due to the fact that the atmosphere—common air—is a poor conductor of Ether, although the air itself is filled with Ether. In low voltage currents one-sixteenth of an inch is sufficient atmosphere to insulate a laden wire, but when the voltage is increased high enough it not only loses its attraction to gravity to a degree, but overcomes the atmospheric resistance in like proportion.

Ether, like that of water or air, is subject to whirling discs or vortices. But being much finer substance than either water or air, yields to the principle of motion much easier and to a larger extent.

We must note at this point that a nucleus of matter cannot be constructed except by the effect of a vortex and heat. And when we look into the heavens and see the myriads of stars and planets, we must also note that the stars are all nuclei or vortice centers of immense whirling Ether discs.

These discs do not jam one against another. In fact, cannot do so, without repelling each other. The intermediate space between discs and their polar fields are bound to be zero fields. That is to say, this space is without afferent pressure or motion.

From the zero field Ether pressure must gradually increase upon the center as it inwinds upon the basis of geometrical law of three to one, beginning at its outer edge at zero and gradually increasing upon that basis until it reaches the center where the circumference would multiply its pressure upon the center three times

for every circuit it makes around the center, together with the fact that each revolution made becomes a compound plane from which the multiple three is added. We call the reader's attention to this because it is the working of the circumference leverage principle of geometry and laws of motion.

When you understand these facts, you will readily see why a cyclone, although not extending out over a space of 100 yards, winds itself around multiplying and compounding upon its center, until at its core it is enabled to lift a locomotive off its track.

Having laid the premises of the zero field of Ether, the geometrical law of motion and its effects as expressed in an aerial cyclone, we are prepared now to consider a dynamic cyclone Ether disc that condenses nuclei Sun centers and constructs them into monstrous Suns and solar systems.

Taking our own solar system into account, it at present time extends out no less than six billions of miles, and revolving around with a slight incline toward the central Sun, with no pressure at its periphery, until it falls into the orbit of Neptune, where it must have generated a pressure or the planet Neptune could not have been constructed.

At the plane or orbit of Neptune, the revolving disc travels nineteen and one-half miles per second, and requires one hundred and sixty-five years to make one revolution around the Sun. Having made one revolution, the next plane within receives an inwinding pressure of three to one of what the outer orbit contained.

Next we reach the orbit Uranus, and within this orbit the revolving disc makes its revolution around the Sun in eighty-four years, adding again three to one of

its Ether pressure. The disc itself travels no faster at this plane, but it has less space over which to travel, and the leverage of the outer and greater space is intensified upon the lesser, which adds to the less the sum total of the greater, so that each cycle made multiplies its force upon the one next within.

From the orbit of Uranus to that of the orbit of Saturn, and from Saturn to the orbit of Jupiter, and from Jupiter to the orbit of the Asteroids, and from the Asteroids to the orbit of Mars, and from Mars to the orbit of the Earth, the same inwind goes on, traveling at the same rate of speed, but constantly being confined to a greater and greater intensity, until we have on our Earth orbit an Ether pressure of not less than 100 pounds to the square inch.

The same inwind continues until it reaches the orbit of Venus, and from Venus to the orbit of Mercury, and from the orbit of Mercury to the disc of the Sun.

Each orbit disc traveling at the same speed, and each one, as it nears the center, having a lesser distance to travel, makes its circuit that much quicker, but just in proportion as the distance is lessened the intensification increases, as well as having added thereto the multiple leverage force from the orbit next outside it.

Putting our solar system and its Ether cyclone disc into a nut shell, the outer circuit is made in 165 years, the next within 84 years, the next $29\frac{1}{2}$ years, the next 12 years, the next $5\frac{1}{2}$ years, the next 687 days, the next 365 days, the next 224 days, the next 88 days, and lastly the Sun itself upon its center in 28 days.

We know Ether pressure to be 100 pounds to the square inch on the Earth's orbit, because we have this pressure supply always at hand and constantly avail-

able to the cores of our dynamos. If we did not have this pressure supply, we should have to provide a means of getting it into our armatures, before we could throw it off by centrifugal motion into receiving fields of wires or storage batteries, but it is always there and with a never-failing pressure supply.

You may now wonder why, if we are under an Ether pressure of 100 pounds per square inch, that we do not feel it. It is due to the fact that Ether interpenetrates everything, and is constant, otherwise we should feel it as we certainly do when the chain of constancy is disturbed by alternating currents passing through our bodies.

Coming back to the subject again, we note that each planet within our solar system travels about the same speed because it floats within the same inwhirling Ether disc, although each planet remains within its own orbit but is held out by centrifugal motion, which motion is maintained by the Ether current the planet floats in, and is held from passing farther out by gravitation to the Sun. All the planets travel the same way around the Sun, within the same disc, including that of the Sun, which rotates upon its center in the same way each of the planets revolve.

In addition to the fact that the whole system revolves in the same direction and that the motion is maintained with minute accuracy, we note that the planets rotate upon their axes in the same direction as they revolve, which fact compels that part of the planet farthest out from the Sun, as well as that part which has the greatest distance to travel, to move faster. The evidence is, that the force driving the planets around the Sun, as well as the Sun itself, must have its propelling force

supplied from the outer periphery, as would certainly be the case in the cyclone Ether disc. Furthermore, inasmuch as the inside of a circle has the lesser distance to travel in making its revolution around the Sun, it would have less resistance against the space it traversed, and even then would not rotate unless there was a specific resistance set up, and we find this resistance in the projecting light rays pouring out against the surface of the planets whose inner peripheries are always exposed to the rays of the Sun.

For additional proof that the Sun light offers resistance to revolving planets, compelling the outer periphery to rotate faster as well as travel farthest, we find that the planet travels six times as far through space, in its circuit around the Sun, as its surface rotates, which establishes the current driving force to be at a point about seven degrees off from a right angle of the resisting angle of the resisting light rays of the Sun, which gives us a perfect conclusion of the degree of incline that the inwinding Ether takes, and explains why we have Ether pressure at our Earth's orbit. It also supplies indisputable evidence of the increased Ether pressure when reaching the Sun's equator, giving it a pressure sufficient to round up the Sun's equator to that of a symmetrical globe, as well as intensify its force upon that focal center to produce an arc light of over 18,000 degrees of heat, and more than 500 times greater in intensity than our most powerful arc lights.

WHAT ARE SUN SPOTS?

The Ether pouring into the Sun in gigantic proportions, intensely cold, produces chill cakes upon the Sun's surface called Sun Spots. The point at which they mostly occur would be midway between the equator and

the poles. Because the natural place for the Sun's frost line is midway between the poles, where the Ether disc has the least pressure, and the equator where it has the greatest pressure, for the reason the equator's outpouring of heat is the greatest and at the poles the least, which overcomes the intense cold and counterbalances its effect. This being what might be expected, crust formation takes place at about 23 degrees off from the equator of the Sun and at times form into floating islands toward the equator, where they melt away, or are driven into the body of the Sun by the inflowing Ether.

Ether pouring into the Sun is melted into matter, as in the case of all condensing substance, and in that way energy of space is condensed into solidified matter, which, however, never takes place without passing over the bridge of fire.

All energy or even all Ether substance cannot be transposed to matter at one cycle of action, hence part of the inpouring Ether melts into solidified matter and remains, and thus maintains the heat and constructs the body of the Sun, while a much greater portion is converted to efferent force that pours out into space in all directions in Sun light energy. A substance at least 11,000 times finer than the Ether rolling into the Sun.

The energy being so much finer than normal Ether (although Ether itself is many thousands of times finer than air) travels over first dimensional lines at a speed of 186,300 miles per second, and passes through the normal Ether without resistance just as Ether itself passes through steel without resistance.

Neither light nor heat pass from the Sun in the Sun

light energy. It is, however, a purely efferent force, which penetrates the darkness of space and its frigid coldness without resistance until it strikes planes of matter, which come under the head of solids, liquids and gases. When striking either of these planes of matter, it finds a base of resistance that offers its compensation in regenerating light and heat.

Energy, like everything else, never loses its inherited character, and when it meets its fulcrum the mother side of Nature regenerates its character. That is why Sun efferent energy, after penetrating billions of miles of cold, dark Ether seas, can reproduce its specific characteristic.

Sun rays when caught up by the atmosphere reflect upon the surfaces of air particles, or gases, and cause our reflected or white light we call daylight. The direct Sun rays supply the seven prismatic colors as their length is divided upon surface reflectors.

Efferent forces that are constantly poured out from the central Suns pass into surrounding space, and when their force is entirely spent, are again taken up by the Ether of space to be again wound into some central Sun. Not necessarily the Sun from which it came forth, because it has gone out to fill its mission of a repellant force to keep out other Suns' encroachments, and in this way the light of the stars (for every twinkling star is a Sun) maintains to each a place in space, and at the same time provides protection over the planets of each star's system from all outside interference, while each star throws around its own family circle the Immutable Law of gravity—Nature's love embrace.

Vortic discs do not all lay the same way in space. They do, however, extend a far-reaching effect from

their disc lines and a much lesser distance from their polar sides. The angle they happen to assume in their revolution determines the line of space each occupies. This will account for the irregular position of the stars.

Taking into consideration the fact that planets revolve around their central suns at the speed of $19\frac{1}{2}$ miles per second, and that it is due to this revolving motion that the planets are held out in space against the enormous attraction of gravity toward their central Sun. We must note the significance of this tremendous force, as well as attempt to account for it.

No intelligent person disputes the fact that the Moon pulls upon the Earth, and that it is due to the attraction of the Moon that causes the Moon tide. But how many of us have considered what that attraction means in the aggregate, or formed any idea of the immense force that is needed to keep a planet in centrifugal motion to overcome, or counterbalance the attraction? Let it be understood that one cannot get something for nothing, and were it not for the constant revolving motion of the planets they would fall into the Sun by gravity, as a weight would fall to the Earth. Now what is the source of planetary revolving motion, and how is it maintained against that constant pull of gravity or planetary attraction?

The answer is, the law of attraction sustains its own source of energy as it operates over and between planes. Water falls to the Earth, but is forced to rise again by the same Law, when it is divided into finer planes of existence. Sap flows up a tree because of the fineness of the tree tubes, or rises in vapor because of vapor's finely separated particles, only to drop back again when

condensed to a plane of specific gravity, when it becomes like unto the plane to which it is attracted.

The inwhirling Ether drawn to the Sun as a point of central gravity supplies the revolving sea upon which planets float. Ether would not pour into the Sun if it was not for the Law of gravity. Planets are attracted to the central Sun with more specific gravity than is that of Ether many times over. But as Ether is so much less dense, has also less of centrifugal force, and presses its way into the Sun while the planets, because of their density, are held out by centrifugal force. Thus attraction furnishes the energy to revolve a planet in a perfect counterbalance against its own gravitation.

While the subject of gravity is before us we feel it essential to illustrate what a monstrous proportion it is. We can determine the force of gravity of the Moon by the measure of the tide in the ocean, the average height of which is $3\frac{1}{2}$ feet. This pull of gravity is not upon the water alone, but the whole of the Earth's globe. The water, however, being fluent, yields to the influence and flows in keeping with that influence. Not the water alone, but the crust of the Earth also yields to the Moon's gravity, and although we, here in St. Louis, Mo., think we are on terra firma, nevertheless every time the Moon passes over us, the land surface on which we stand raises not less than three and one-half feet and settles back after the Moon passes. This is due to the fact that our globe is not solid, but is a mass of molten liquid under a crust and this crust yields in tide waves to the extent that all the solidified rocks of the earth crust are cracked into seams, some of which form great slips, and slow action landslides.

What is the force thus expressed? It is $1\frac{3}{4}$ pounds

to the square inch, 258 pounds to the square foot, 5,688 tons to the acre, over $3\frac{1}{2}$ millions of tons to the square mile (3,596,313 tons), and when spread to one-third of the Earth's surface, or that portion exposed to the tide, amounts to over 230 trillions of tons (230,164,110,400,000 tons), yet in spite of this enormous gravity pull upon our planet, we have no scales that can weigh it. It does not pull upon the object, but the whole planet, which, when applied to each particle, is infinitesimally small.

The Sun being 400 times larger than the Moon, and 400 times farther away from us, provides the same proportion of attraction. But as the Sun is a brilliant body it reflects an efferent force sufficient to overcome four-fifths of the attraction, hence we have about an average six-inch Sun tide only. If both planets were brilliant there would be no tide, because the attraction would be completely overcome and the surplus of efferent force doubled. With this surplus the planets would be pressed farther apart, as is the case with the myriads of stars in space.

The Sun light energy strikes the Earth's surface with a force sufficient to re-generate heat and light, just like that of the Sun, for the character is never lost. This force expended upon the Earth's surface equals one-horse power for every square foot every twenty four hours.

SHOOTING STARS OR METEORS.

The formation of attraction centers, and the inwhirling motion that complies with the law, is everywhere present and potential. It occurs upon every favorable impulse. Ether is more fluent and in consequence more susceptible to the law than liquids or gases, and

any disturbance out of the regular forces, such as planets passing in conjunction in space, or the shadows of Sun spots crossing space, will set up vortices in Ether, and when once started they grow and become more and more condensed as they float within the grand Ether disc, and are picked up as they cross the orbits in proximity to planets and are drawn in. When these vortices strike our atmosphere, the resistance our atmosphere offers causes the Ether vortices to melt into matter and fall to the planet in a chunk, or sometimes to burst into fragments in their sudden cooling as the movement dies down and they fall to the earth in dust specks.

These manifestations are called meteors, or, by some, shooting stars. It is generally believed that they are fragments thrown off from planets by volcanic actions, but there is no reasonable explanation how the force of a volcano could send out any portion of lava beyond the unlimited reach of the attraction of the planet possessing it. While the Laws of Motion, as explained in the Ether vortice, is a logical conclusion.

Every disturbance of Ether disturbs the atmosphere around our planet, so that the conjunction of planets, like cars passing each other on tracks, disturbs the air, or the shadows of Sun spots, though invisible to the eye, have their effect in changing our weather to violent storms. If there were no disturbance, weather would be a constant calm and rainfalls would be even and gradual.

The atmosphere is a non-conductor of Ether, although the air is loaded with Ether, it rejects a free passage of it, which produces openings and pockets causing layers of cold or hot waves. In this way the atmosphere is a pillow of protection over us in catching the force of

Ether balls, as well as a blanket to protect us from the frigid Ether of space that would, if not for this protection, freeze organic life out of existence in less than a second of time.

COMETS.

The same law that produces the Ether vortex and the nucleus centers forming planets is expressed in the formation of comets. I contend that comets are not of regular order nor do they have regular intervals of appearance, but that they are etheric vortices formed out in space and approach our Sun at one or the other of the polar heavens, and are drawn in by the attraction of the Sun. They are more dense than meteors and offer a resistance to the light of the Sun, causing shadows to be cast behind them. When they come in close proximity to the Sun the light entirely overcomes the attraction, and they are taken up in the Sun's Ether disc, thrown around it in the way of the travel of the disc, and immediately shot off into space with the shadow, or what we call the tail, always projecting away from the Sun. Being more dense than normal Ether, they, like planets, would possess centrifugal force, and could not flow into the Sun by way of the disc influx, but like the planets be held out within the orbits of the outer rim of the disc, unless the approach is made outside of the disc, which before reaching the Sun, penetrates the disc giving its whirl around the Sun as the light force propels it off.

This being the case a comet cannot penetrate the solar system to the interference of any planet, because of its density, being sufficient to take on centrifugal force, or penetrate the Sun while it offers a resistance to sunlight sufficient to produce a shadow.

CHAPTER VIII.

EVERYTHING THE RECORD OF ITS CREATION, OR A SOUL WITHIN EVERYTHING.

In dealing with the subject, "A Soul Within Everything," let us first consider what is meant by Soul. The Soul has often been construed to mean the inner or immortal part of man. That part which survives the physical body and departs from it in the event called death. Our version of the Soul would mean that portion of us that lives in memory. Not the active forces, but that which becomes the record of our being—our mental combination. In other words, our mental organization, which to all intents and purposes is a body, because it is a created thing. It begins in its first thought and motion and grows by each other thought and motion thereafter. The Soul in itself cannot move, but is moved by the forces within, as any other body is moved. That is to say, it can move as a form in relation to other things, but is bound in memory fixity relative to itself. In other words, the soul of any thing is the permanent fixity of the thing that in order to express movement must do so by a dual nature—an active partner, wherein the living, active part is conjointly connected with the silent part, and the two extremes become the dual—one.

Energy expending itself condenses movements into record and that record has an organization possessing action and silence—life and form. Any movement made, any energy expended, records its movement, including environment and character, and although the

movement ceases and the whole becomes a silent record without activity, it is nevertheless a thing of matter, and the record and character of that matter is its Soul.

Soul is a thing created. It is not life but uses Life, for Life is a principle of action, not a thing. The Soul is a thing of development and growth, but Life is not, for Life is a limitless force. We cannot know a thing by the Life it uses, but we know it by the inherent character and record it possesses. Each thing having a different record and different environment, differs in its Soul qualities and we know its qualities only as a Soul's expression.

All expended energy takes on the state of sleep, and this condition we call the sleep state of Nature, which embraces primordially about one hundred different basic physical elements.

In addition to the elements of the base physical matter there are an endless number of planes where finer and finer forms are constructed, and each of these forms working under the same Law, record their Soul characteristics within them. For illustration, the physical body is a formation within the physical plane, and each for itself bears its physical characteristics or Soul records. Within the physical form is a mental organization of a higher plane, and it, like the physical body, is a combination—a construction, hence a body—that moves as a whole, relative to other things, but not as to itself, and in due time separates from the lower physical plane in what is called death. The mind body, like the physical body, has its active (thinking) part, and its silent (memory) part, hence a dual oneness that, like the former, lives in the wake and sleep states of Na-

ture in a higher plane, which is not broken down in the change called death.

We are told that "the Creator breathed into the nostrils of Man the breath of Life, and he became a living Soul." Still, we are not informed as to what a living Soul is. The idea of the breath of Life came to man very naturally through the fact that at birth he manifested Life when he began to breathe, and at death he ceased to breathe. Later on it was discovered that man ceased to live and even breathe when he had suffered extreme loss of blood, so the conclusion followed that Life was in the blood.

There is no argument supporting the belief that man is a living soul because he had breathed into his nostrils the breath of Life. Every reptile, animal or bird breathes through their nostrils in the same manner that man does. We might also go farther and include vegetable life, for the leaves on the trees and plants have nostrils and breathe.

It is not because a thing breathes that it has a Soul, although the breathing gives to it a larger expression of Life. For everything has a Soul, including each of its combinations. The Soul in fact is the intrinsic quality, character and record of the thing. The body has intrinsic qualities and character, so has the mind. The one is mortal, the other immortal. The mortal remains in the lower physical plane, and the immortal is already within the mental plane. Yet for a time they both occupy the same body, one possessing a physical record, the other a mental record. The one consumes physical substance, the other thought substance. One is automatic, the other becomes arbitrary.

The physical soul is subject to dissolution and chem-

ical change, while the mental is not subject to decomposition, but lives in a plane where it is itself a creator.

The botanist can read the record and character of the flowers in their shapes, colors and variety of formation, as well as the ingredient qualities in stalk, leaf and petal. He can name every variety of fruit by their outer appearance, shape and colors, or by their taste and smell. He can name the different kinds of wood by their fiber, quality and the indelible records within their grain. For each inherit and bear the record of their own age, durability and character. Each and every one bears the record of its own creation and we can read it by the Soul within it.

The farmer can tell the character of the grain he cultivates; he can also tell the character of each animal of his flocks, because each bears its own distinction. Each have records of their own creation, and we know them by the Souls within them.

The geologist knows the character and record of the soil upon which we trod. He can read each individual rock in the infallible record it bears of its past. He knows its age, environment and character when he sees it. Each layer, like the leaves of a book, reveals its wondrous history.

Old Mother Earth, like every other thing, has a Soul within it. If we cannot read it, it is our shortcoming, for it is there, a marvelous and enduring record of its past.

CHAPTER IX.

EVERYTHING A PARASITE.

Everything that depends for its existence upon something else, is a parasite. What is not dependent for its existence upon some other thing or things?

In order to reach back to a point where there is likely to be nothing upon which to rest, we finally get back to the Principles upon which all things rest.

Everything in existence is dependent, but constantly struggling for independence.

Nothing upon the physical plane can be said to be absolutely independent. And inasmuch as a thing is dependent upon other things, it is to that degree a parasite.

Basic Matter is a parasite upon the casual Principles of nature. The mineral kingdom in its salt and carbons germinate vegetable organic life. Beginning very slowly at first, it evolves to endless capacity and diversity.

Decomposed, decayed or digested vegetation becomes the basis of protoplasm, and out of protoplasm the animal kingdom evolves. And from and upon the vegetable it must ever live and rest a parasite upon that kingdom.

Out of the animal kingdom has gradually evolved the mental world with its independent Will, Reason and Imagination, and whether or not these functions remain dependent, they certainly are, as a basic source, parasites upon the animal kingdom.

Vegetables depend upon the salts and carbons as well as fix their roots in the base of solidified matter. What

they supply and eject goes to feed the animal world. Vegetables absorb the carbons and give off oxygen. Animals take up the oxygen and eject the carbons—and to that degree vegetation co-operates with the animal kingdom. Being fixed to the ground vegetation is independent as to movement, but is entirely dependent for sustenance upon the carboniferous food it extracts from the Earth and the air.

The mental world depends upon its basic central function within the animal world and its line of contact to other things as a source from which it can create a thought. And thought by thought it constructs its mental form. Individual mind is a parasite upon the flesh. First dependent, with its ever and endless struggle toward independence.

It is beautifully illustrated in the works of Nature in the construction of the rose. First the soil, next central sprig, then its roots and stalk, branch, bud, blossom and finally its perfume. Each step upward, though all alike dependent upon that just beneath, but each part in its upward trend becomes more and more independent.

Matter itself, which is at rest does not need to consume. But anything that takes on organic form and action must consume. Thus it is that everything is ever striving to consume something else. Organic forms not only have to live upon something else, but have also to consume something else.

What a thing is and what characteristics it may have, depend upon how it rests, and what it consumes. The greater the consuming capacity and the broader the base, the more extensive are the characteristics, and by far the greater parasite. Man seems in this line to cap

all else, for we try to consume everything else. Even to whatever each other man has.

When anything reaches a point at which it ceases to consume, the organism breaks down and is in turn itself consumed. Physically speaking, Man eats the Bird, the Bird eats the Worm, and the Worm eats the Man, and thus the never-ending process goes around and around.

However much our moral sense may impugn, we cannot escape the repulse of consuming the individual characters of organic life. True, we do not destroy life; we consume the individuals that use it. We cut off their career, as in turn shall take place with ours. We may not devour the living forms our mortals repel, but we go back a step farther and consume the potentials of living forms in embryo. Or further still and consume the food intended for their young. So we eat the egg that was provided to feed the form of the embryonic chick, or the fruit that nourishes the seed.

We are told, physically speaking, that man was formed out of the dust of the earth. Let us see how true that is. We have just stated that man physically was a parasite upon the animal and vegetable kingdoms, subsists upon the vegetable kingdom, and little or nothing upon the mineral kingdom. His solid foods are created from ninety per cent water, nine and one-half per cent of air and one-half per cent of mineral, or dust of the earth.

Man can live without solid food forty days, without drink five days, without air fifteen minutes, and without Ether one-half second. This will give a better idea of what the physical form is constructed, as well as what is required to maintain it.

Whatsoever we depend upon, we are to that a parasite,

for life itself is but a principle we are using. There is not a breath of air that has not been breathed over and over an endless number of times. Not a drop of water in all the oceans that has not been drank millions upon millions of times before.

However much we may wish to escape the fact, or however hard we may struggle for absolute independence, we cannot annul the fact that we are related to the rocks beneath our feet. And are bound to the one stupendous whole, the offspring of the one and same beginningless and endless principle.

Despite all our efforts, all our earnest desires, at best, we are mental parasites upon the flesh. And mental parasites to the degree we have others to think for us.

One may morally feel a protesting sentiment against taking individual life in order to sustain his own personal physical form. But at this time we cannot escape, the inevitable, while denizens of this state of development. We can only depart the consequences to a degree.

Though we may refrain taking life in its highest forms, we step down the scale and eat the seed of life germinating characters, or if not the seed the fruit that for which the seed would have fed in its embryonic life.

Man is the perfume of Organic Life, but not yet detached. He is the mental parasite clinging fast to ignorance that must grow over barbarism and savagery to intellectuality, to Spirituality.

Nature does not work by scheme, design or prearranged plan, but by process. When Man becomes intellectual, as he surely will, he will be able to direct the endless and boundless process of Nature's ceaseless and limitless energy along lines of producing everything his heart desires and his appetite craves.

We know full well that energy applied over any line will produce results along the lines of characters established. The time will come, if it is not now approaching, when we will be enabled to construct plants that will germinate an endless variety of food supply, without resorting to cattle to chew for our milk, butter and beef, or pigs to chew for our lard and pork, or hens to peck and scratch for our eggs. For this at best is unwholesome. Nature does the work now, and Nature is boundless in its resources. When man realizes this fact he will set to work to direct this boundless power toward deliverance from the animal parasite to the independent man.

CHAPTER X.

LAW OF HEREDITY.

Individual development, both mental and physical, begins in a dual focal center, and like the type from which it springs, develops to diversity.

This development is the result of afferent force and develops individually outward by efferent force. The individual entity, sometimes called ego, is a center around which form and combination is constructed. The primordial individual center being first established at conception within a simple molecule, the fatherhood and motherhood as a conglomerate selfhood.

Energy suspends itself as it condenses toward centers. In the case of planetary formation, the force drawing condensed energy to a common center we call gravity. When it is brought about by the same Law as in the union of dual type lines we call it Love. At any rate, it is all the same Law.

In the case of any organic form, in order to exist it must consume; and when it consumes it produces surplus energy, and in the union of surplus energy is where the re-generated individual begins.

In the first place, all living constructions are simply, slowly developed combinations—automatic aggregations—a result of conditions. They first evolve as they are pressed out of conditions by surrounding environments. And since all things brought into formation are simply their own records of existence they become characterized by the continued environments they are subjected to, and at the same time register all experiences

impressed upon them, as they become moving, living characters.

The Law of Affinity constructed the planets. The same Law constructs all combinations, but out of different elements and under different environments. Every organized combination has its differentiation, because it germinates from a different basic condition. We cannot say a thing has life and that life can be taken away from it. But each and everything does have its own combination and character and uses the laws of action, which is Life.

The vegetable kingdom expresses the first process of organized development, and it gradually works out of a condition that at first could only produce a fungus growth. It, as a matter of course, resulted from a condition, and in its process of development diversified into no less than five thousand varieties. In the fungus stage there was exceeding frailty, because the condition did not support anything higher. It represented all the laws of motion and geometrical forms, but there was no tensile strength. It had to extend its development over life lines before it could become staple in organization.

Plant life in its first stages did not produce seed, but grew alone from conditions or was extended in multiple activity by dividing itself. That is to say, be regenerated from the various parts of the stalk. There was no such thing as branches in the first growth. A branching out followed later. There finally came a state of higher environment. The atmosphere became clear and free from poisonous gases. The sunlight shone more clearly, and along with the sunlight the blossoms and flowers. Thus, a new state of existence dawned—a

better condition prevailed. Vegetable life began the process of regeneration in a higher plane of environment. The vegetable kingdom now lives, in two planes of existence and are joined together by life line ties that reach across from one generation to the other, by the lines crossing in the junction center—its seed.

The seed is an inheritance of the hermaphrodite plant, when crossed in the blossom by the flora energy of another plant becomes a focal cross line of regeneration.

The question so often asked, "Which was produced first, the acorn or the oak?" is answered in the fact that the acorn is the junction of dual life lines. Oaks grew millions of years before acorns could possibly be developed. One oak produces millions of acorns, but no acorn can produce a million oaks. While we are on the subject, the question so often discussed arises: "Which came first, the egg or the hen?"

This question, like the question of the acorn and the oak, answers itself in the selfsame way. Some hens produce hundreds of eggs per year; some are fertile, some are not; but no egg ever produces an hundred hens.

The egg is a junction of dual type lines that developed after the type had advanced beyond the Amoeba stage, which took ages to accomplish. The animal kingdom, like that of the vegetable kingdom, had first to develop to where it reached a re-generative power to extend over two planes before it could produce seed of re-generation.

The first stages of the animal kingdom, like that of planetary creation and vegetable life, were in the unit development, although by way of a dual process within the unit.

Nature never produces a pair and stops the evolution there. Primordially combinations organize into multifarious units from a condition. The units are limited only by the condition from which they evolve. A condition that can produce one combination can produce millions at the same time, and this is just what does take place.

In Nature's process the movements germinate from centers to circumferences, which, by the principle involved, means to diversity and multiplicity. In this sense Nature provides continuity against accidents which occur even within that majestic realm. Were it not so, Nature could not stand against destruction of any kind. The probability is that instead of all animal life springing from pairs, there were endless varieties at one time that are now extinct. The fossils in the rocks of the crust of the earth bears witness to many extinct species.

The Amoeba offers the best lesson we know of to illustrate the source of animal life. The conditions necessary to promote Amoebaic life is a protoplasmic substance. Decayed vegetation can bring this about. The principle conditions following this are a given amount of heat, light and darkness, which constitute the energization.

The Law of Affinity works on particles of matter drawing them into combinations. The same Law that forms a planet forms the nucleus of an individual Amoeba by condensing energy into centers, from which it begins a construction of an organization that in its first stages has but two functions: the drawing into its center and the evolving out, which means consuming and eliminating. The Law of Affinity is the source of appetite, and the first thing that takes place is for the

little nucleus to absorb the surrounding protoplasm. This is chemical action or digestion. When this action takes place, the little Amoeba begins to grow. It reaches out for food supply. It draws the energy around it into its center and converts its body into a more tangible substance, by constantly eliminating that which the Law rejects.

This process goes on until the form is constructed to proportions, although still quite small, but bulky for that stage of expression and manner of movement. Each part of the body undertakes to care for its own, and sooner or later the form begins to separate until it hangs together by a single thread. This thread snaps, and then there are two Amoebas where but one existed before. Both of the same age. Both of the same combination and character. And although at first one individual, are now two.

What has taken place in the development of the Amoeba to this stage is the result of a condition that is not limited to the one, but subject to every other condition of a like environment. If the environment differs, the character to that degree will differ.

Coming back to the individual Amoeba again, it is interesting to know which is the parent or which the offspring, for in the original the two were a division of the first one.

Life is action, that in consuming constructs formation. Formation is a combination, and the combination is contents of its own experience and environment. That is to say it is the record of its past and character of its own combination. The energy that brings it into being and the virgin substance it consumes is the energy and

substance that maintains and perpetuates it thereafter, so long as it continues to consume and eliminate.

When the first Amoeba was developed, it naturally was a very minute object, but, being first, it must also be the first generation of its character, considering that all others coming into existence at the same time and under the same condition was of like character. But to deal with the question analytically, we must work from the base of the one individual.

The first individual develops to full unit capacity and then separates into two parts, which now has reached the stage of re-generation. At the second generation, one is no older than the other, hence neither one can claim parentage. The two separate and go right on developing as the first one did. When they reach the full rounded-out stage, like the generation from which they took birth, they began to separate, and in time there are four Amoebas where there were but two. Neither one of the four can claim to be the older, for all four lived in the first generation and passed through the second, and are now in the third. These four Amoebas proceed to develop as the first two did, and these separate into eight, and thus the process goes on doubling up in numbers as they divide in each generation. When they reach the twentieth generation, they have multiplied to the enormous number of 275,648 individuals, each having the same age, the same experience and the same inherited characteristics. They might, some of them, differ at this time, as they would drift apart and come under a new and different environment, but inherently they are from the same source, or the one line of continuity. We give this illustration to show what is meant by the tree of life. For what is true of the

Amoeba is true of everything having an organic formation of life. What takes place in the life lines of Amoebaic life is due to the fact that afferent force consumes to its common centers energy out of the protoplasm. You can call it chemistry or digestion, whichever you choose. It makes no difference what you call it. It is a process of consuming matter and transposing it to re-generated molecules of another character. That is just what takes place in building the physical body. First a single molecule, which grows and divides. Energy pours into it, and it grows and divides again and so on continuously. The energy is supplied and transferred to all parts of the body by two channels—the blood and nervous fluids.

Each molecule of matter, like the general form itself, has its own peculiar differentiation, and is attracted to that part of the body to which it is nearest allied. The brain matter to brain, the eye matter to eye, muscle to muscle, skin to skin, nails to nails and hair matter to hair. All, however, traveling over an invisible life line matrix to which it automatically conforms.

Inheritance carries with it the power of transmittance of character—the miniature record of all experience over which the life line has passed.

In order to comprehend the Law of Inheritance, the lesson taught us in the Ameobaic life is a natural and true guide.

Every individual born into the world, no matter as to what species or type they happen to belong, are the result of re-generations. In the Amoebaic process the re-generation is by division, but the animal kingdom, like that of the vegetable kingdom, has developed to a higher plane and has reached the stage of blossom

where two flowers intermingle and re-generate into seed as a focal unit partaking, not from one parent by division, but from two parents by union.

When animal life reached the stage of blossom and fruit it not only doubles its process of re-generation, but multiplies it. It not only unites two forces in re-generated inheritance, but supplies each individual with two parents instead of one, from which to inherit its physical character and primary mind.

Primary mind is dual essence intensified. It is the potential qualities of each one combined in order to become individual. It is character lines or life lines projected from one generation to the next bearing the record of all its past, and these lines become and are the very point of conception, must generate. The generating process is within the Laws of Nature and its consuming forces. When energy accumulates, it must find expression which, when expended, goes over the line of least resistance. The line of least resistance is the lines already established in the potential qualities of the primary mind and characteristics inherited by the individual, and where there is no impediment it will follow these lines; so, regardless of the ignorance of the parents, the offspring may have sound, staple qualities.

Inheritance in essence is memory extended. In the lower animals we call it instinct. But what we call a thing does not change its character. The animal does not have to be taught to walk or feed itself; it possesses the parental knowledge in detail.

Mankind is more helpless because the combination is more intricate and extensive. But that need not be a hindrance. The helplessness of all offspring is due to the fact that in animal life each individual in the pri-

mary mind and character is conglomerate. That is, they are dual—the expression of two parents—and upon this conglomerate mind and character is to be constructed an individual mind and an individual character. The offspring might lean to one or the other of the parents, or both, or it might not lean to either, for within its inheritance is the essence and character of all the preceding generations of its type.

It is not a question of life that concerns us, for life is not a construction, or a combination. You cannot inherit life. You cannot add to it or take from it, but like food or air you can use it, and by using it, maintain an unbroken character lineage.

We note that life is not a thing of personality, but a principle common to all things. Life is the principle that exercises in transforming material around individual centers and carries them along given tracks, and what is really seen to move along these tracks, are characters that when once started move and project down through the ages. Always evolving to higher and higher organic formation with more and more extended character, but at no time departing from their original type line. These type lines are in fact the Life Lines, and while each and every species differ from each and every other species the Law governs each and all forms of life are the same. The reason one differs from the other is due to the fact that lines leading from a center of development, makes it impossible for any two things to be exactly alike in detail.

Type lines are held by the silent or mother side of action, and can change only by gradual development, or by being crossed or merged into other types of kindred

character. When they do emerge we have both characters amalgamated into one.

If the amalgamation is completed new type characters may seem to have developed. But if the amalgamation is not complete, both types mule out, and become extinct, in which case becomes the end or the branches of the tree of life.

The "I am" within is the dual personality. It is hard to grasp the thought because it is the primary and conglomerate self. In the individual consciousness which is constructed upon the dual "I am" we feel to be better acquainted. We have personally witnessed all it has experienced and we feel this experience to be all of our life. But when we concentrate in thought, there is a glimmering light that reminds us of having lived before. But the memory of it splits apart in the line of our dual inheritance and while we know the past, it is indeed a blank.

Some think that they have lived before; so they have, but they know not where, they know not how. Some think they were once males, some think they were once females. So they were, since individuals are born from two parents how could they escape that feeling.

Sometimes we feel we always have existed, and why not feel so since back of all creation we are the result of principles that have no beginning.

If you feel that your individual life does not go back to the primary dual focus and from there back through all the advancing development of re-generation, whence and at what time did it have its beginning? Had the line of start once been broken it would not now be in existence.

Nothing ever comes into existence in perfect for-

mation. Everything must gradually develop out of the absolute, and that is an infinitesimal center beneath the reach of a microscope. All type lines develop that way, and in ages evolve by re-generative step process in well rounded-out character forms. The individual like the type itself only finds its finished form at maturity and not at conception. Even the mind is an organization that is evolved thought by thought. All that the individual receives at first is inherited. His inheritance is what he primarily was and nothing more.

To come into animated formation you do so through established lines. One cannot slip into tangible form except by junction center evolved into being from the type to which one is related. The descent of type species is maintained by indelibly fixed homogeneous lines. There are no short cuts or missing links from one type expression to that of another. No haphazard jumps from a potato to a rose, or from a rose to a cabbage or a monkey to a man.

Each and every distinct specie alike have their origin in the primordial cause and each and all are marching up the line of eternal progress in their own characteristic way. Why some things favor other things is due to the fact that all creation is the result of the one and same eternal source.

Some people think we came from a spiritual and must return to a spiritual. If we were once spiritual why come at all since we must return? Nature does not work that way. Everything evolves from the infinitesimal and moves towards the infinitude step by step. Ever up the ladder we must climb. Although creation has divided everything into planes, groups, species and fam-

ilies, we are nevertheless as a universal whole Natural relatives.

The rocks and soil beneath our feet, the vegetable kingdom which we admire and upon which we depend, the animal kingdom to which we are so closely allied, are all naturally related to us. Man assimilates them all and man partakes of them all in character and form and outgrows them all. And though man is the greatest combination; and so far as our planet is concerned, he is also the highest expression. There are peculiarities in some of the type expressions that deserve special mention, among which are that the Amoeba represents both male and female principle. But instead of projecting energized essence into the re-generation, it actually shares division of its body. Then there is the tape worm that is constructed in joints, any one of which might be shed off without annihilating the progress of the worm, which is also true of the joint snake. There are vegetable stalks representing the functions of both male and female, which is demonstrated in the corn stalk. At a principle joint of the body the seed is produced, and at the top of the stalk the fertilized tassel which sprinkles off and is caught by the silken line running to each kernel through which the fertilizing energy is carried to each. In the case of the corn stalk the top is masculine and the body of the stalk feminine. The potato plant which shows artificial development along the lines of Nature's Laws, is also wonderful in its development and growth. In the first place the potato plant is but a common root that grew along the sea shore of western South America, but when brought into inland territory developed into a plant with extraordinary capacity of re-generation. It

not only grows seed at its tops, but seed at its roots. In truth it re-generates from both ends. The flower of the top, however, seems to be the only fertilizing portion of the plant. In fact the power of re-generation is so great that the seed on the top of the plant will re-generate as well as the seed that grows under the surface of the soil, and prior to either seed there is the stalk or root itself that will grow into full maturity.

Organic life did not originate from seed. Neither vegetable nor animal could possibly come that way. For the reason, before a seed could be produced there must be a flower, and before a flower can be generated there must be a stalk upon which it can grow. Any person with a fair portion of intellect can readily see that the plant comes first, flower next, and fruit and seed at the finish. What takes place in one manifestation takes place in all. Its *modus-operandi* is universal. Furthermore, although a seed grows into stalk and flower, it can only be said that the seed is a junction connecting a present growth to a previous generation, and so on down the line.

Coming back to^c our subject we can find no better lesson than illustrated in the egg.

A normal fertile egg contains potential character. The male and female life lines united. If the egg be subjected to a heat of 110 degrees the life lines will be broken and the egg become de-fertilized.

The scientific world searched in vain with microscope to find bones, flesh and feathers within the hen's egg, but found no apparent difference between a fertile and an unfertile egg. They had not discovered that fertilization was an invisible life line of potential characteristics, that depended upon conditions to be re-

generated into a living chick, and it is well at this point to explain in a scientific way how the process of development is brought about.

The white or albumin of the egg is condensed food that can be converted into chicken molecules without oxygen supply. It is in this portion of the egg that the potential germ of chicken type is deposited. When the egg is placed in the incubator, or under the mother hen, and the heat is brought up to 104 degrees, the heat energy penetrates to the center of the germ and condenses its energy there, then re-bounds back to the surface. This influx of heat and its evolving outward sets up action in the same manner that the Laws construct a planet. The inflow constructs the nucleus and this nucleus becomes the heart. Its outflow constructs the arteries and the inflow the veins. Follow this process out for four days, crack open the shell and apply the microscope, and if the egg is fertile you will see the heart beat and the bright red arteries pulsate as they extend toward the whole surface of the egg. You will also notice the veins of a darker hue drawing back the flow to the heart. When this process is kept up seventeen days longer, it will have had time to consume all the albumen of the egg into energy over its own character lines, and in the meantime have converted them into chick molecules and have completely constructed the young chick. And why does it do it? Simply because there was a potential although invisible character organization that enabled the heat from the mother hen to set and keep in motion the forces of consuming food, so that the embryotic chick actually with the aid of the incubator digested the egg and con-

structed its form and character along the lines of its potential essence.

When it had consumed all the albumen, the young chick become in need of oxygen and ether. It cracked the shell and breathed in the air and ether. The air oxygenized its blood, the ether filled its brain and muscles with energy to break open the shell and the chick is hatched. Its form was constructed around the yolk, which with the oxygen supply, becomes digestible and serves as food supply for 24 hours thereafter.

The Law of Inheritance is the re-generation process of character building. Re-generation is a mode of vibration. Within the individual each pulsation is a vibration. In the construction of the chick the flow into the heart and out to the surface is a vibration. If it was possible for matter to be transposed to energy, then transposed to chick in one vibration, simply the heating of an egg would cook it into a chick. But since it takes many cycles before matter can all be turned to energy, or energy to matter, it requires at least 21 days to complete the hatching process of the egg.

Intelligence re-generates as well as character and form. If the animal be domestic it will follow out a domestic habit. If it be wild in due time it will express its wild propensities, regardless of its new environments.

A duck hatched under a hen will take to the first pond of water.

A wild bird can be domesticated by a few generations of domesticated habits. But it will for many generations become involuntarily frightened at what was its danger in the state of its ancestors. Just as man to-day unconsciously fears the snake that has never bit him.

If we are to be governed by the public press, and statements of the educators, it has never dawned upon man, why the offspring, without tuition, is enabled to care for itself in the intellectual mode of its ancestors; or why plants of the various species such as grapes, plums, pears, apples and the hundreds of varieties of fruits with each their different method of form and each their different specific characteristics, all grow out of the one soil, breathe the same atmosphere, absorb the same sun light side by side and yet maintain their own type lines and distinct characters. Or why feathers grow on birds, hair and fur on animals, wool on sheep, yet all subsist on the same grain products; breathe the same atmosphere, drink the same water and bathe in the same sun light, yet each eternally live within their own established character and constantly re-generate within their own type lines. The answer is summed up in this fact: it is characters that live, each for itself. Characters that are capacitated by the Law of Consumption, assimilate environments and food elements that they each are enabled to digest, transpose to energy and have that energy spend itself over established lines, invisible tracks, over which energy flows, each to construct its own character for it has no other; thus corn, water, air, light, and heat constructs feathers on birds, hair on horses, wool on sheep and fur on the wild beast, or any other animal that happens to have a digestive apparatus for that diet.

While it is true that vegetable life is maintained by the carbonic elements, and animal life is sustained by the consuming of vegetable, or animal flesh itself in many instances, we are nevertheless aware of the fact that what goes into the food supply has much to do with

the character of the type expression consuming it. This is due to the fact that in consuming molecules of one flesh to build molecules of another, not all matter is turned to energy in the one process of digestion, for much of what is consumed must be eliminated, and much of the character of what the food supply embraces is not altogether digested, but passes over the lines consuming it, and marks its record upon the new individual construction.

We are not entirely wrong when we state that man becomes hoggish by eating pork. The truth is man partakes of most every thing in sight and within his grasp. In fact he teaches himself to indulge in chewing and smoking poisonous weeds, injects into his system poisons, and delights in swallowing dregs of the infernal art. He has contracted every disease his anatomy can gather in, and has extended his character to the embodiment of every other organic animal species on the face of the earth.

So much has man partaken of the things that he has consumed that to find an excuse for his similarity to that of the animal kingdom, writers have felt, and so expressed their conclusions, that man descended step by step out of the types of the animals. And so far as we know there is not a mind that believes in the descent of man through the evolutionary process that does not endorse this as truth. Regardless of what the scientific world have said, we affirm that type lines of species do not jump from one to the other. On the contrary, each distinct species has its own Life Line of inheritance and each alike starts from its own primordial center, and each alike establishes its own characteristics and follows them out, each for itself under and by virtue

of its own tree of Life, and that each and every specie is under the same Laws, as well as progressing each for itself according to capacity and environment, from that of the flower in the forest to the endless variety of vegetables and fruits in the gardens, or from the lowest animal to that of man.

With a wholesome view of the process of Nature one need not look for missing links from animal to man. We need only to unwrap the descent of man himself to learn that in generation after generation he constantly evolves. And that he now progresses is evidence of what he really is, and what he is now he has been, but further down the line. So looking down the ages of the past to discern him in his primordial state we must first strip him of his mental powers, his vocabulary, his extreme combination of character, until we find him helplessly void of words, thoughts and mental capacity, as well as physically naked; dwelling in trees and caves. Unwrap his descent still further and he fails to walk erect. He crawls on four limbs for he is a quadruped. He worms his way over the earth and in the sea, for he is a vertebrate. Lastly he is a tube and a cluster of cells—molecules, and finally a single embryotic molecule.

Nature never forgets its past, and she indelibly photographs the history of the race in the process of embryotic life on every normal personal unit, carrying out in the most minute detail the unbroken chain of the process of the evolution through which the type has passed, and at no time does there appear a gap or a missing link. Man came all the way through the animal kingdom, but at no time was he or is he anything but the outgrowth of an embryotic man. And just as sure as his start was within the absolute and infinitesimal, his des-

tiny is bound to be eternal progression toward the infinitude.

Of all organic animated life, man surpasses as that of the greatest combination. But he does not excel in everything, for there is scarcely a character or function in him that is not found in the animal kingdom below him, and ofttimes in larger capacity. This phase of the subject is treated under the chapter of "From Animal to the Spiritual Man," and needs no further comment here. We only need to call attention to the fact that man, like the vegetable and animal kingdom, has his character re-generated through the same Law of inheritance. The intelligence of the animal is called instinct. In man it is called education, but so far as the primary mind is concerned, animal and man are alike; as also is the function and process of re-generation. Each individual has his conception by virtue of surplus vital energy focalizing into a single molecule. The molecule has in essence all the potentialities of its parents, including their specific type characteristics to the most minute detail, in essence of intensity. It may not be that the offspring partakes the exact character of the parents, because it partakes of all the ancestry of the Type Line and some of the characteristics may lie dormant while others quicken to action,

We, each of us, have two parents to whom we are indebted for our individual combination of character, capacity and power. Not a thing do we possess in a primary way that we did not inherit from them as the links joining us to the human Tree of Life. If our parents were not human beings, we would not be. If our parents grew on a pumpkin vine they would be pumpkins—and we would be pumpkins, too.

Each of our parents under the monogamic law of marriage has two parents, and going on back we have four grand parents, eight great-grand parents, sixteen great, great-grand parents, thirty-two great, great, great grand-parents and so on doubling up the ancestry and we go back to the twentieth generation, when we express as many as 275,648. This would mean that each of us reaching back but four hundred years wind into our character links 275,648 threads. What is true of one individual is true of all; and together the Human Tree of Life spreads its lines criss-cross, entwining the entire globe and dividing by three grand phases of expression, namely: The living present, the un-born and the departed.

We live as individuals in three planes of activity. First, each individual inherits the dual character from the Human Type Lines and is truly born into a physical molecule at this focal conception. Here he inherits continuity, a characteristic, in all its details with potential powers and capacities. In other words, he is a mental primary duality. From this state on, he soon constructs personal functions, and is ushered into Individual Life. From that point, knowingly or unknowingly, he constructs his own destiny.

The mental along with the physical has constantly progressed. But with the physical decomposition and renewal the inner mind remained continuous and perpetual.

It has a combination and character of its own to project into continuity, and moral development that outlives the physical form, and, like the chick in the egg, picks its way into the outer and larger sphere of existence.

Every environment pressed upon the individual mind makes a permanent indelible impression. Suffering and misery in the mind of the mother constructs a sweeter conscience in the child. Thus the moral evil, with its detestable effect, returns in virtue in the offspring. The education of the mother reaches the primary mind of the child, in the indelible mother marks, that do not appear in the flesh alone, but in the mind as well. We personally know of a child born into the world with a mess of tomatoes in its face; the result of the mother being assaulted and struck in the face with a dish of tomatoes before the child's birth. We know of a case where a young man could not endure the pointing of a finger toward him without producing hysterical effects. We knew of a young man who could not restrain himself from pinching every unsuspecting person he encountered, because of the habit of the father to pinch his mother before he was born. We also knew of a young lady who would, every few minutes of the day, stretch up her neck, become red in the face and gobble like a turkey, all during the springs and summers of her entire life, because her mother, during the child's gestation, became suddenly frightened by a turkey gobbler while alone in the woods. We need go no further in this phase of the subject because the facts are too numerous and the question too well understood to need further proofs that mental characteristics are inherited, and that at times the flesh is made to bear a visible and lasting record.

Since the sudden impulse upon the mind of the mother can find permanent effect upon the mind of the child you may be assured that the education of the mother means the education of the child.

The time is coming when children will not need

a tedious mental struggle for their education. The very sight of a thing will open their mind to a knowledge of it. The young bird in its nest knows how to hold open its mouth to receive the worm long before its eyes are opened to see the worm. The little chick picks up the grain of wheat, thrusts its head forward to make use of the Law of inertia in passing the grain down its throat. It sips its little bill full of water, raises its head high in the air to allow the water to pass down its throat and immediately and effectually wipes its bill as a grown human being would use a handkerchief. Where do little chicks get their intelligence if not through the Law of inheritance? When this law is better understood the development of the race will increase much more rapidly. The coming generation will learn how to develop morality and leave crime in abeyance by treating the case from a prenatal standpoint, instead as we now do in punishing effect without removing the cause.

We have stated throughout this chapter that the seed was an essence concentration of a dual type expression. That in the vegetable kingdom it was a sleep state of animation in potentiality ready to be quickened into regeneration. And that vegetable as well as animal species are character elements all from the same absolute and infinitesimal source but differentiated according to environment, composition and route each has taken.

In referring to the sleep state, we are informed that wheat buried by ashes and lava in the ruins of Pompeii for over a thousand years was dug up and planted in soil and that it grew, but that it showed the loss of that period in development, which as a matter of course is to be expected since the other grain had expressed over one thousand re-generations in the meantime.

The farther back one traces species or type lines the closer each thing is allied, for the reason they have had less time to diversify. Besides, when a thing is stripped of its environment and character development we have reached the primordial from which all combinations have their beginning.

Everything develops and maintains its own character. Were it not so one would not know a thing when seen. For illustration, we call attention to an oak. There is the white oak, the red oak, the swamp oak, and the live oak. They all differ because each bears a different record of environment. The botanist knows them all as oak in the character of the wood, bark and leaves, as well as their specific difference as environment has effected them.

The characters of vegetable life formations bear in their records views of all their compositions. They show it in solidity of fibre and express it in odor. In the animal kingdom there is a differentiation in the color of the flesh, a difference in taste and in odor. While there is some difference in each individual animal there is a close resemblance in each specie as to its own specific characteristic. For instance we know at once the taste of beef, pork, mutton, chicken, etc., etc., and what is true of the physical body is alike true of its mental characteristics. And all these are in a primary sense due to inheritance, and whatever improvement follows is due to environment and individual development.

The human species being is the largest combination mentally and physically on the earth plane. The primary mind of a human being is so elaborate and extensive that a great portion of his character may remain in abeyance without defect to the individual, and because

at times the offspring do not closely resemble the immediate parents a faith in the law of inheritance is weakened.

There are inherited character lines in the feathered tribe that deserve mention, among which are the birds that build their first nests without instruction, depending entirely upon an inherited intellect.

Some birds build their nests of leaves by actually sewing the leaves together as a tailor might do, so we call them the tailor birds.

The cuckoo birds will not build nests. Neither will they hatch or feed their offspring. These birds watch their chance to slip into other birds' nests and lay their own eggs and at the same time dump out the other eggs to avoid suspicion.

The cuckoo birds are inheritedly opposed to maternity. They are therefore lazy, cruel, cunning, deceitful and murderously inclined. What condition or environment could have brought about such a trait of character is hard to even surmise. It is even harder still for the birds that happen to be cruelly duped into hatching and raising the cuckoo intruders to understand how they became parents to the strangers growing in their nest.

The question is often raised why some species advance faster than others, and some to a much higher degree of consciousness. There are two principal reasons for it. One is the experience and development of the parents, the other is the individual environment experienced.

The ape and monkey tribes would have probably been much farther advanced if their pubescent age was fifteen to twenty years instead of two. It is hardly to be ex-

pected that a monkey could inherit mental capacity from parents not over two years old. For how is it possible to inherit what the parents cannot and do not possess?

Longevity and parental experience are the qualifications most essential to the propagation of an advanced primary mind in the offspring.

Mankind has been gifted with longevity and endurance that gives him precedent over the general animal kingdom. His curiosity was early developed and curiosity is the forerunner of mental development.

Outside of the law of inheritance we cannot account for established character in the offspring of the primary mind of each individual. Much less to explain how a normally bright and perfect infant could be born to even silly parents at times.

In the case of the human family the offspring have the advantage of parental education from fifteen to fifty years and the children are of course descendants of that education. In the ages gone by it was not deemed advantageous or economical to educate the girls, and all the energies in the line of education was bestowed upon the boys, who were intended to be the coming heads of families, and who were supposed to think for the families that they might each preside over.

All this is being changed now, and the girls share alike the education of their brothers. This privilege means a better education for the mothers of the coming generations and a like measure of advancement in their prenatal mental development.

When the mothers of the race are educated we will not have to drill education into the children. They will be born with educated primary minds, which have only to be individually aroused to activity. For mental

powers and characteristics, like the physical, must develop from within and the easiest way to get permanent results is through prenatal education.

When the parents are educated the child ought to surpass either of them, because the primary mind of the child is the product of both and if the child does not surpass its parents it is due to an abnormal condition.

The time will come when castes, religions and nationality will cease to be a barrier in the complete amalgamation of the race, and when that time comes we will have a new race of people; for it is well known that the shortcomings of one people is to be found in some other, and when the whole are united man will be made up with a much more elaborate combination than he now possesses.

In concluding this chapter we feel that justice would not be done the subject if we neglect declaring that man as a character being, is an individual miniature of the race. Each of us are both male and female, with a percentage of tendency to one side or the other. That in some functions we may lean to the male side while in other functions to that of the female, and that it is altogether a matter of individual development, a result of prenatal influence, and that the sexes are divided through the equilibrium of universal demand as the greater energy always throws the pendulum to the opposite side, and that the results are due to expressed energy in the molecules.

The human character, individually speaking, is a mental character, and what characteristics are in the physical body are also in the mental body, and all that we are, in both character and mind, is fixed and locked up in memory and the combination as a whole we call

the human soul. Each soul has a life line tie leading back through the ages in its ancestry covered and saturated with all the environments of all the past generations as well as to every thing that the individual sensed, thought or experienced.

This is what constitutes our inheritance. This is what we know to be the Immortal Soul, no part of which can be erased from existence any more than planets can be changed from their orbits over Nature's invisible lines, for all come under the same immutable Laws.

CHAPTER XI.

SURVIVAL OF THE FITTEST.

It seems the title is an answer to the question. How could it be otherwise? We note, however, that the rule does not apply to the Moral Law.

The physical fitness of a thing to survive depends upon its power of resistance. In the moral sphere, fitness is a thing entirely outside geometrical dimensions, and belongs to the sphere of consciousness. For this reason moral fitness cannot preserve physical fitness. Therefore, in discussing the subject we must first deal in the physical and its effect upon the moral plane, which is an outgrowth of physical conditions.

The seventh Principle of Nature, or Law of Compensation, provides its measure of development according to energy expressed and resistance overcome, so that whatever a thing is capable of resisting, determines its measure of fitness. Anything that withstands the ravages of the elements or environments does as a matter of course, survive. The power of survival depends upon how close a thing may be allied to the sleep state of nature, and how much it can resist being removed therefrom.

A thing resisting change over the greatest environment and time is expressing its surviving power and the capacity of its fitness.

Matter is energy expended and confined to the state of rest, and can be forced back to its original state. The extent of resistance it offers depends upon its intrinsic qualities, which is due more to the element of

time than to anything else. For illustration, an artificial diamond made from the same quality of carbon lacks in every way its fitness to cope with the natural diamond, owing principally to the fact that one is suddenly produced, while the other has within it the crystalizing force of the ages. Survival therefore is expressing Time, and Time is part of its make up. This law, like the Law of Gravity, eternally perpetuates its manifestations, and with an ever increasing propensity.

In the mineral kingdom the survival of the fittest depends largely on its resistance to being disturbed from the state of its individual character. Time adds to each thing its virtue. When we consider the vegetable kingdom we find the same resistance to change or annihilation with this difference: in the mineral it all depends upon the present tense, while in the vegetable or animal kingdoms, it reaches into the projective by re-generation and self defensive preservation as well.

In vegetable life the struggle for existence is carried on principally with the roots under the surface of the soil. The roots that spread over the greatest territory, absorb the most nutrition, and out-reach their competitors and therefore have a greater capacity of survival. Above the soil the struggle is to reach the light, and that plants tending to overreach others, survives to the measure of their fitness.

In the animal kingdom environment plays an important part in the construction and character of forms. Any use develops capacity in the line of effort. The Law is there, and a thing is compensated merely by use.

Tender forms readily yield to environment. The chameleon, for instance, in a brief time will assume the color of the leaf, plant or stone to which it hovers.

We mention this to show the effect the Law of Environment has upon all things, but in most cases the influence is slower than in the case of the chameleon, because the resistance to change is greater. In this manner we can account for spots on animals and on the feathers of birds. It will be noted that birds frequenting certain habitations sooner or later resemble their surroundings so closely that detection is difficult, and this protects them from becoming prey of animals. Thus they survive because environment furnishes them protection from discovery.

Some animals depend upon fleetness as a means of defense, and animals of that nature usually have large keen ears, and sleep with eyes open, enabling them to hear and see in their sleeping moments, and whenever any disturbing element encroaches they are at once off to a place of safety. Usually such animals are inoffensive and could not survive were they to adopt combativeness.

There are animals wholly aggressive and their survival is quite apparent in their ability to catch and consume their prey. They survive to the extent they can capture and devour. The stronger ones survive the weaker as the stronger are sure to be most successful and thereby the best fed.

The crane that gets the most fish because he has the longest legs and neck survives over the short-legged and short-necked crane that must be fed, or die sooner than the more successful long-legged members of his type.

The giraffe subsists on branches of trees and survives to the degree he succeeds in securing his food. If there be a shortage in food the short-legged and short-necked

giraffe must succumb first, leaving the most fitting to survive.

Survival feats are not alone confined to the present tense, for the action produced by mental desire develops forms best equipped. Work and mental cunning play their part in the shrewdness of the crane to deceive fish by a silent careful manner of wading into the water and remaining silent, like a stump, until the unsuspecting fish approaches.

The cunning keenness of the mind that aided in its present tense, projected its effects into re-generation, giving to the offspring, even as keen mental qualities which were to be subjected to even greater capacities, in the individual possessing them, so they not only survive because of their fitness to consume and live, but multiply the fitness, generation after generation, until the formation becomes a wondrous mechanism of organic Life.

In the case of man the law of fitness is the same. Although carnivorous by nature he is largely a defensive creature. His methods of securing animal food was in his ability not to overpower but to worry the animal by prolonged chase. It is well known that man's endurance in the chase can overcome most any animal, but being a defensive creature he resorted to fruits, nuts and grains as his sustenance, and his method of defense living in trees and cliffs. To all intents and purposes he was an animal—an animal man, with stern factors to overcome in the acquirement of necessities, without which he could not survive, and we are safe in the conclusion, that there has been innumerable efforts of nature to produce characters perhaps even superior and of finer qualities than any race man has descended from, but that they have become extinct, as they could not survive

the awful carnage of the animal creation. As much as we may speculate, were it not for the water defenses of seas and rivers as barriers, in all probability our own race would be extinct today. For when man became the eater of man he experienced his greatest struggle for life, and a new process of the survival of the fittest was brought into play.

In the development of cunning, man would sneak upon his fellow-creature, kill and eat him. It was the expression of might and will. Reason had not dawned upon him. The next stage of development showed the effect of reason approaching. The most cunning would seize their weaker fellow-creatures and make them servants and slaves. Later again, the shrewder possessed the lands and lived at ease themselves, while the helpless and ignorant clothed and fed them. Reason expands again, and the slaves were made free, while the cunning still survived and prevailed in living upon the sweat of the brows of their fellow-creatures, by speculating and gambling in finances and the necessities of life. Since man started across the chasm from the animal world in his helpless state of existence to that of the intellectual, he not only had to fight his way upward from the ravages of wild beasts, but worst of all enemies, he had to contend with man's inhumanity to man.

The light of the day is dawning. Reason will be enthroned, and when that function assumes its rightful place in the minds of men the true mental survival of the fittest will be established. When reason has to contend with reason the encounter will be constructive, not destructive. The defensive as well as the offensive will be developed by the use of Reason.

Coming back to the subject we note that in the con-

struction of molecules the most enduring survive the weaker in the combination of physical forms, and as other molecules must take their places in maintaining the general structure, they most naturally follow the line of greatest demand. That part of the form used demands the most and gets the most. Organs are constructed and evolve always toward the requirements until the physical form becomes fitted to every expressed need.

Sound waves press their influence on everything they come in contact with. Light waves reflect and impress sight lines upon everything the rays touch, so everything is effected by sound and by light, to the degree that everything hears and sees. There comes a time when moving and acting characters become quickened by having developed within them entity centers. Between the source of sound or source of reflected light, and the receiving entity centers focus is established; the ear or eye follow as the focal center over which sound waves verge, or sight lines cross, and where molecules must replace molecules, generation after generation, in the course of the survival of the fittest, the ear and eye like every other organ of the body came into being to fit requirements and uses of the invisible forces. Thus the sight lines established the eye, and the sound waves established the ear.

Where the light is forever turned off the eye as an eye ceases to exist, but like the fishes of the great Mammoth Cave of Kentucky where eyes are no longer needed and where the eyes once were in ages and generations gone by, they have rudimentals now as enduring records that the fish once had eyes. The same results would follow the organ of the ear provided sound would be stilled, as would also be the result that would inva-

riably follow the cessation of use in any other organ of the body.

A slight stretch of the mind will determine that sound produced the ear and sight lines, though invisible, produced the eye. To take from the ear or the eye the forces that produced them will just as certainly put them out of existence, leaving nothing but the records of their having once existed.

When the mathematician wishes to prove his problem he reverses the process and if results are what they were when he started, the conclusions are conceded correct.

For illustration: if you subtract 5 from 9 you will have a residue of 4, then if you wish to prove it, add the 4 to the 5 and you get back to 9 again. If you reach the point of beginning and find what you started with, then you have tested your case by one of Nature's Laws; the Numerical Principle, and where the rule is followed conclusions are bound to be correct. So to determine how any part of the organic body was created we have only to determine their functions. If the ear hears sounds, and the ears be sealed a sufficient time they would become functionless and fail of hearing. If this be true then sound becomes the potent factor creating the ear. If the eye sees objects by reflected light over the lines of contact from objects, then if objects, or reflected light, or lines of contact, be removed, and continue the absence long enough, the eye will become sightless. If by the removing of the reflected light from objects puts the eye out of commission for the lack of a maintaining function, then it is reflected light from object by sight line contact that constructed the eye.

The process largely instrumental in the work of the survival of the fittest in the lower cell, or molecular

formation, has its first environment in the Law of Affinity, attracting like to like, and repelling the opposite or inharmonious. The next stage or plane of action is the polarities, or a better name for it would be sexual selection, which works automatically and expresses no other choice than the opposites that are in harmonious relation. When the mind becomes active, even exercising a low degree of judgment, it begins to sway the molecular natural selection and the polar sexual selection under arbitrary will, which is the third plane of activity, and is called mental selection. This form of mental activity runs a long way down into the animal kingdom, and is instrumental in producing several well-known characteristics and functions, among which are the plumage and musical songs in the birds. The most beautiful in plumage and the sweetest singers survived because of the mental selection of the female birds, for the males must court the taste of the female to secure a mate for propagation. The male bird is always the suitor and he must impress the female mind of his charms.

In the case of the man the male is the selector and on account of this fact the greater effort to produce charms and beauty falls to the lot of the female, which without doubt adds to their advantage in securing mates.

We mention the mental phase to show the almost unlimited advantage to be attained where the mind is influential in the prenatal impression upon the offspring. Whatsoever the parents strive for they are enabled to mould in the character of the child, and the results are far reaching, especially from the mother.

The mother's mind is constantly attached to the charm of beauty, and the child is marked with beauty.

Nowadays the mothers are better educated than of old, and it is constantly being manifested in the children, for who can doubt these truths when they see the brilliant and charming qualities in the children of these later generations.

In olden times it was not considered expedient that women should be educated or express any sort of educational liberty. They were not supposed to be anything but helpmates for their lords and masters and the less they knew the more content they would be with their lot in life. Man was only to record from the male side of the household, for the heredity lines were supposed to run only in the male progeny. In fact the female was not even suspected of having a soul. In those days the human family was nurtured in the womb of ignorance and the babes were raised and rocked in the cradle of mental depravity. All this has changed. The female is coming into her natural rights. She is being educated alongside her brother and the dawn of her political liberty is at hand. She is now known to have a soul, and she at last, is credited with being an equal factor in the promulgation of the type lines of the Tree of Life, and that to her side is to be credited the fundamental fixed characteristics of humanity.

Up to this time the full force and effect of the duality has not found expression, hence the process of the survival of the fittest in man has been largely curtailed. The coming generations will inherit education because both parents will be educated. The primary mind of the child is the product of surplus mental energy of the parents meeting in a focal center of the child mind. If the parents have no surplus mental energy, what can you expect the child to have? Certainly not what it

could not inherit. The best result in educating the child is attained by educating the mother.

When all parents are educated in the laws of life instead of how to take commercial advantage over their fellow-men; how to live here and now, with a maximum result, the child will then be nurtured and matured in the womb of intellectual maternity. It will be rocked in the cradle of culture, and guided by the hand and brain of intellectual motherhood. We will then have a full expression of the survival of the fittest in the mental world.

CHAPTER XII.

USING AND ABUSING.

All of Life is habit of doing things. Living is expressing and experiencing. All habits are efforts of using or abusing.

The normal use of any thing constructs and maintains that thing. Over reaching or excessive using is abusing and destroying the thing used. Every act in Life comes under the head of using or abusing; constructing or destroying.

To use the functions of mind enlarges and develops those functions.

To use the functions of the physical body, its organs or muscles, means to construct and maintain them. To over-reach in the functions of mind, or physical body, or to use excessively any organ of the body or mind, is to abuse that organ.

It is well known that to strap one's arm to one's side and not make use of it, the arm in time will wither away. So non-use of any function or organ, as well as excessive use of same, is abusive and destructive, while the normal and reasonable use of anything is always constructive. Since there are no two individuals, or two of anything, exactly alike in the world, there can be no hard and fast rule to govern what really is abusive and what is constructive. For what is moderate use to one is oftentimes abusive to others.

The best guide to determine the proper use of a function is moderation to the degree that it shall never exhaust all its energy. A true guide is, that only the

surplus energy be used, always keeping a little reserve. To use ones account in full is apt to mean bankruptcy, which holds good to any function of mind, or any organic forces of the body.

The habits in general, are usually normal habits. One can cultivate gradually away from the fixed habits or general customs, but to do so suddenly is abusive and destructive. While to do so under practice, followed within the boundaries of the surplus energy at hand is normal using and constructive, as well as leading to success of special accomplishments.

We often hear persons speak of violating Nature's Laws. They do not mean just what they say, for it is not within the province of any one to violate Nature's Laws. What they really do is, transgress rules of Life—habitual customs.

Anything, however bulky, can be set in motion where energy is applied and long enough time is absorbed, so that whatsoever habits one may follow, will become the Law of Life, if the person takes time enough and maintains the necessary energy. Habits that are abusive in personal experience, may become customs and rules of Life, if followed generation after generation, although it is destructive to the first habitual contractors, it becomes normal custom when followed for ages. Herein lies the power of the human race to practice a common rule of life that would kill if applied to the lower animal kingdom. In order to illustrate what is meant, we refer to the fact that one drop of nicotine will kill a snake or rabbit, yet a man can learn to suck it from his tobacco pipe and relish it.

There are many practices that are exceedingly destructive to the individual now; such as morphine using,

which, like other infernal practices, if followed for many generations, will place them, within the scope of human endurance. One thing we are quite sure of, and that is, no matter how degrading a thing may be, there are always individuals ready to use, and in a measure, become the willing destroyers of their own happiness.

It matters not what speed anything attains, it can be stopped if energy and time is given to accomplish same, while to do it suddenly is to violate a rule of action, and serious consequences follow. Whether it be solid matter or elements of high planes all things are subject to inertia and momentum.

Care should be exercised in the uses of the mental functions. The excessive use of one function, or one line of thinking, is destructive; constant normal use of a function is constructive. There is another important phase that enters not to be overlooked, which is the constructing of one function at the expense and neglect of all others. In order to have a well balanced mind all the mental functions must alike be developed, for the mind is much like a tripod and depends equally upon all its functions. Should there be one of abnormal growth or several insufficiently developed, the mind is not well balanced and totters, so to speak. A shortcoming in one function, or an over development in another biases the mind, and through this many individuals for no other reason, are classed as insane. The excessive function shows up distinctly and is easily discerned by anyone, but where functions have shortcomings, it is hard for even intimate friends to discover what is lacking, so we simply say he has a "screw loose" somewhere, or "bats in his belfry."

It is an easy matter for a mind to unbalance when

fatigueingly following extraordinary effort, thinking or acting in a rut or groove. It is a brilliant mind indeed that can see its own weaknesses and follies. The best guide is to keep constantly before the mind the subject of "Using and Abusing."

CHAPTER XIII.

FROM ANIMAL TO SPIRITUAL MAN.

There was a time when Man did not exist on this, our earth plane. There was a time when this earth did not exist, or the solar system with its central Sun. For everything of a constructive nature had its infinitesimal beginning upon which its structure was composed.

Before Man could exist with his unique and expansive composition, there first had to be a condition that was suitable to produce and sustain him. For with Man, as with every other active character, his primary stages of development were an outgrowth of conditions and environment.

It is true we look at Man as being so far remote from a primary idea that we are prone to place him in a sphere entirely separate from that of other things. But this is due to the fact that we view him entirely from his present status. Our eyes are closed to the fact of the law of gradual development which applies to Man as to all other parts of creation.

First there was need to have a planet upon which to build baseline formations. Secondly, there was need to have substance suitable for such characteristic construction. Thirdly, that substance must first be created before a higher development could ensue.

The great majority of people are prone to the belief that Man was created a perfect being, yet they know that he is not, and then soothe themselves with the idea that because he is not, that he must have fallen from his high estate. The truth is every individual has to

grow from his primary start, as the race itself had to do, and that each individual as with the race, is constantly growing toward a larger and larger development. Since improvement is a universal and natural sequence, why should we think that anything should have its finish in its start?

If things are all under the process of gradual development, and the future always has greater events in store, what are we to conclude, when looking down through the past, but that it always has been so, from his primordial conception? That being true, how far have we to go in order to trace Man's exalted mind back to his animal brain, and the vegetable organic characters from which the brain was produced?

In speaking of Man we must do so from the standpoint of mental capacities and mental powers. And to fully comprehend him we must analyze him from top to bottom.

Although the mind germinates in the physical protoplasm, it does not feed upon it any more than we eat the mineral because we live upon it. The physical form is created and sustained out of physical substance and the mental form is created and sustained out of mental substance. The physical form digests physical substance and out of the energy created through the digestive process constructs and maintains physical form. While the mental form—a form of thought accumulation—digests thoughts, and with the mental energy thus created, constructs and maintains mental formation.

Each and everything has its own character, for everything is a character combination within its own plane, and to a degree dependent upon the plane it first germinates. The mind depends upon thoughts and

thoughts are mental contacts. The animal man depends upon the physical man as the physical man does upon the protoplasm. The protoplasm upon the vegetable kingdom and the vegetable kingdom upon the mineral kingdom, and all depends upon energy and principles beneath them. In that sense we are all relatively connected, while each character formation increases as it takes form in planes above, and becomes more and more independent from the plane it first germinates, until at last it reaches a plane of arbitrary power, and in a measure becomes a creator itself.

In the lower planes of character building, the best Nature could produce outside of the mineral plane was a projection of vegetable fungi; and although this condition reached the stage of over five thousand varieties, it was in itself but the baseline upon which the flower and seed plane could be established. The reason for this lies in the fact of environment. The atmosphere surrounding our earth was filled with carbon gases, which had first to be transposed, and following it a finer condition that provided the advent of a higher expression. Flowers then grew, and crossed the one to the other, the adoption of a dual union in the state of seed, which before that time was a projective division life.

In the state of the flower and seed is established a new plane of vegetable life. In this plane vegetation took on fiber and strength whose every move was to establish record and character in larger and larger degree, until vegetation reached the state of sensitive consciousness. Plants became carnivorous, not only to feed from the soil, air, ether and sunlight, but to feed upon germs of animal life.

The sensitive plant became so enlarged with conscious-

ness that it almost reached over the line into the animal plane.

Evolution is compound addition, and for that reason each advancement made gives rise to still further enlargement, both in character and capacity. So while things begin exceedingly small, and exceedingly slow, the advancement and character when once enlarged, become more and more rapid.

In the first place sunlight pouring into the mineral soil, which by the way clothed in darkness, provided life lines over which spontaneous development toward the light of the sun followed. Thus spake the little blade of grass "I rise to seek the light." The same sunlight that plies its energy into the darkened soil, poured its force into the cell or animalcule that germinated embryonic thought, which in ages developed the active mind. For the reason that when lines are once established energy continues to flow over them, and so long as the energy is maintained the records are made and characters established. Thus the little start evolves into the unlimited capacity of active and creative mind.

The physical form of animal life, like that of the vegetable, had its first impulse of action from the principle of collective formation into growth and division. It maintains that same growth process today, although the physical, like the vegetable, has long since passed into the expression of the flower and seed plane of union life in construction of individual character forms.

We are reminded that although the physical body is builded under one principle in its constituent substance, that its individual form is created by another and higher plane—that of dual union. If this were not the case,

we, like the crawfish, could grow out of our bodies a new limb that might be amputated.

Since our physical bodies express a development of two different principles that work in two different planes, it is not so hard to see how the mind, although clothed in flesh, can feed upon its own sustaining substance, live in its own plane of existence, although for the time being, is technically connected in the coat of animal form.

The higher the plane the more extended is the combination of character, and the less is it subject to change or decomposition. In fact it is doubtful if mind substance ever decomposes or disorganizes. Tracing the individual mind from its dual primary conception through embryonic gestation to child life, thence from childhood to maturity and finally the aged man, we note the continuous renewal of the physical body, but know of no change in the mental except that of compound addition.

The human being is a combination living in several planes with each plane of action under different principles. Not only do we live in the several planes, but have several forms interpenetrating one the other. The mental interpenetrates every cell of the body and remains a fixture to inhabit the new cells as they are divided into accumulated growth. In separating from old worn out cells the mental body does not miss them, and is organically fit to separate and subsist in its own plane finally without them, as it certainly must do in the event called death.

In all creative development Afferent energy, which is the involving, is supplied from without, and Efferent energy expressing outward, provides the line of growth

to any and all characters, from the within to the without. Just like the bud unfolds the flower, the physical form unfolds the mental mind and out of the mental mind comes the Spiritual Man.

There is one thing we must bear in mind, and that is that the process of creation is still going on, and to a degree much more rapid than in any of the past ages. But we are lead to believe that all we see in creative growth is but transformation. In other words that there is nothing new under the Sun. We are not willing to accept the latter idea as truth. For while a very large portion is transformation; nevertheless along with the transformation is always to be found a constant stream of new elements of creation.

We advance the idea that the principles of nature are an endless source of energy, and that energy in making its cycles over matter from plane to plane suspends a very great part into newly created substance constantly, and that one of those elements is mind matter.

A simple illustration will give the reader a clear idea of the creative process. All creation builds from centers outward, although from the without comes the energy supply. Take for illustration a cylinder, puncture it with holes and revolve it upon its center; in doing so this sets up centrifugal or efferent force, and whatever substance might be in connection therewith—let it be water, air, ether or light—in passing out, it will take on form and character from the holes in the cylinder through which it passes. If the holes be round, the stream will be round. If square, the stream will be square, or any other shape that the meshes have to pattern the stream.

Sunlight sends into space a constant energy flow,

which when it strikes our earth surface may be absorbed by some vegetable plant, wherein it is enabled to set in motion water, air and ether, and in the cycle of those elemental vehicles, character formation takes place, for the reason the plant, like the revolving cylinder, pours out its established characteristics. If the plant happens to be a rose, there will be developed the rose. If it happens to be a grapevine, it would produce its established character—the grape. If it happened to be a pumpkin vine, the light energy would condense into a pumpkin. And thus it would be throughout the whole category of vegetable formation, including the animal kingdom.

There is water in the pear, the apple, as well as all other fruit and vegetable products; there is also air and ether there. But neither air, water, nor ether contain elements that go into the differentiated constituents that characterizes each product to itself.

We may distill, analyze, compound all the elements that are used as conveyors or vehicles in the process of constructive energy and we will not find the element that will produce a nut, a plum or even as much as a mustard seed, unless we send the energy into condensation over character lines as constructive moulds that must first be established.

Character lines are invisible tracks over which, and through which Nature's Invisible Forces are ever pressing into constructivity every element and thing of creation from the plane of the fungi, to that of the intellectual and Spiritual Man.

Before we proceed further with the subject we wish to make clear the fact that it is character, embracing compound combinations that we are dealing with, and not life, or such a thing as life form; for truly speak-

ing Life is not a thing. Life is a principle of action. The expression of a consuming force. The process of consuming energy and suspending Energy into Matter, and the consuming of Matter and expending matter back to Energy again.

Characters or type expressions, grow, develop and project so long as they have the power to consume. For when consumination and digestion take place, Energy is the result, and Energy must expend its force. It must move. When it moves over a resistance it leaves its record, and compensation is the establishment of character clothed in matter. The individual is but a junction unit of the type itself. The type lines project its life lines through the union of the individuals, and the individuals are the fruit of the type. Each individual is a unit essence of the type it represents. Everything being normal it is characterized up to the highest achievement of the last generation. In other words, every individual is a true miniature photograph of all the entire race from which he is a part. Every individual passes over the line of development that was traversed by his ancestry—through the Law of vibration. Regeneration from the wake to the sleep states, under the process from the dual focal projection to the center or intensified seed develops and completes the rounded out individual again.

In the route of our ancestry, specific lines were traveled, and specific character established. We lose neither the one nor the other, for both lines and characters are projected from generation to generation. The lines, although invisible, are never broken nor are they ever abruptly changed to other type expressions. Neither are the characteristics ever lost, though they continue to

project from generation to generation down through the ages. Starting from their primordial cells, or molecules and adding new and larger characteristics, each generation, step by step, from the amoeba, Man has traveled down through the ages, to our present state of development. Not through the step process from animal to animal, but through the type lines of his own character, gradually established.

Type lines are lines of continuity—Energy expending its force over its own lines as lines of least resistance—traced throughout Nature everywhere, and what is true of all movements and things, is true of our life lines. The Human Type Line is an unbroken line from the original protoplasmic condition, to the present stage of evolution. Inheritance is the process of continuity of character. Each generation, each individual, is the fruit of the type of which he is a part, and like the tree of fruit, inherits the full compliment of character and power—which is Nature's power of continuity of Life.

When a thing of character once comes into being, it cannot again depart into the absolute from which it emerged, but must develop outward toward diversity, space and infinitude. Science has eminently settled the question, that nothing can be destroyed, although it may be dissolved or transposed into other forms, and establish its power of resistance into new forms and characters. The all important question is, to have the power to resist change, and the capacity to continue to consume, construct and maintain an organic being.

In the first place we have inherited the power of continuity. But the lines of continuity are not one perpetual incarnation in the physical form; but the power to construct the form, use it for a time and through it

project its surplus Energy into a new generation of ten-fold multiplicity. And while it does this, in order to maintain individual continuity, it must have the power and capacity to forever construct its combinations from the within, and in spite of the fact that it must shed its physical leaves and bark, and finally the whole of the grosser physical form, but that in the meantime it shall have been able to construct real and substantial properties as planes of action within, like worlds within worlds, rings within rings; so that in shedding off the outer coil, does not determine the continuity of the consuminating and energy generating forces within. For so long as the center has a power to consume, it has a power to sustain, construct and maintain. If that is true, and all Nature bespeaks the fact, then we are not longer interested in a physical body after we have conceived an identical acting and projecting center of conscious being. We are interested only to have the capacity to be born out of our own physical bodies into the finer and more real existence. A position not physically tangible, but it, like the life lines of inheritance is invisible, but enduring. Taking the view of the Law of development from a primordial center, our individual life has its beginning in the focal junction of the type lines expressed. From this infinitesimal point, we individually start our course of individual development. Our basic self is the primordial mind given us through our parents—father and mother—is dual conglomerate. And like the tree of life here we begin our career to construct individual consciousness. From this starting point, leach-like, we cling to our mother's womb, are supplied with her surplus energy until there comes a time when we cannot longer be sustained by this supply. We demand more, and

like the chick developed in the egg, struggle for parturition, and express our natural right to continuity by struggling for a greater supply of food, air and light. Thus we call it birth. But is it really birth? Not any more than the point of fecundation, for there is where the real individual comes into being, and the event we are so accustomed to call *our birth* into individual life, is really the second individual epoch of our being, and when we are forced to depart from our final physical form, in what we call *death*, is nature's greatest effort to hatch out the flower of the individual consciousness into a new and higher plane.

In the first stages known as our foetal life we sleep in the dual parental mind. At birth the individual mind has begun, and constructed by our environments and sense preception, thought by thought, feebly at first, but stronger and stronger as the individual mind grows, and from the period of what we call birth to the event we call death, we think one thought at a time, and maintain over ninety-nine and a half per cent of our consciousness in the sleep state. When the event comes we call death, all consciousness is a birth out of the physical form.

The question is, have we the power and capacity to continue active organic centers, and the perception of continuation of personal awareness?

If we are to be governed by Nature's Laws, individuality begins at fecundation, and so far as the individual is concerned, inherits continuity, because we are the fruit of a type line continuity, not because we are born and developed to the full physical being, although a full rounded out physical life has its merits. But because we are the fruit of the thing established. The principle

of individual life is the maintenance of its primordial center—the primary mind and character. If each individual had to depend upon his own power and capacity in order to develop, maintain and continue personal power of individual endurance and awareness, there would be few indeed that could attain it. But individuals are not separate from the race, they are a part, and each of us have an individual capacity, because we are fruit units of the long life line of the ages. Hence we are dependent for our present individual powers and capacities, while our destiny is within our own hands.

We are dependent upon the past, and independent regarding our destiny. The great question then is, What shall we do to promote the building of the Spiritual Man? And what powers and capacities are we needing to accomplish the desired end of continued personal awareness, and the experiences and joys that continued individual consciousness bring?

In the process of the building of the Spiritual Man we can arrive at true conclusions, provided we use basic premises. There is no question about continuity; the only question is the power to continue personal awareness, and what is necessary to promote individual organized continuity.

Mankind has had a material conception of things. As a rule it has regarded itself as physical being. And what was known of the inner Man was but a vague idea. Mankind has not taken into account that the indwelling organized consciousness has all along been the real, and that the physical form, while having served as a vehicle to express and evolve the Spiritual Man, is builded in conformity to the requirements of the desires from within. It is true that the beginning was auto-

matic and remains automatic in its development until the arbitrary mind becomes developed within, and that where the arbitrary mind begins to assert desire, new and larger steps of evolutionary progress are made.

The physical form while the most tangible is the least permanent. And truly speaking the inner man is also physical, although we do not always call it so because of its intensified fineness. But matter in its completeness reaches back to force, and where one begins the other ends. The point most apparent is that within the organism of the individual man, which is both matter and force, and the finer the matter the nearer the approach to force, and in like manner a condition less susceptible to change and decomposition. The molecules of the physical body are constantly being broken down and cast off. While the mind or Soul within remains fixed in its memory, changing only by growth and has a capacity we call mental force.

It is due to the mental force that the physical form is constructed to meet requirements. The effort of the mind to accomplish anything sets in motion the power to attain the result. A movement to accomplish a desired end sets in motion mental lines and also stimulates muscles to action and development. While this subtle force is at work to accomplish a desired end in the effort of the individual, its surplus energy is projected into the seed of re-generation and it there comes out more fully expressed than that of the effort effecting the construction of the powers and capacities of the individual expressing it. Where the mind has the power through the function of desire to build a muscle and extend its surplus force into re-generations, it also has the power to extend by use the capacity of the mind itself within the

individual, and also the power to project a higher function and power into the re-generation that follows. It is reminded that in a former chapter we stated that not all of energy is transposed to matter in a single cycle, and not all of matter in one cycle is transposed to energy. There is always a waste in the process, so that the desire of the mother to develop her talents, develops the talents of her offspring.

It is not necessary that the person desiring to accomplish a thing shall know just how to direct the forces, for the reason that the desire made and the effort expended always constructs the powers and capacities in the line directed whether known or not. It is not operated by outline, scheme or design, but by Nature's immutable forces of establishing lines of action and conformity of process. We are accustomed to look upon everything from our own view point. That we first plan, then move to conform. This we call human intelligence and its proper uses we call wisdom. But it is different with the universal intelligence, for that is an immutable intellect that does not require thought, nor change of viewpoint, for within the realms of Nature all things become normal in time, when brought into conformity through gradual process. What is poison to one generation, if its use be persisted in becomes food supply in generations that follow. In this way whatever one generation sets out to accomplish is normally attained in the generations thereafter.

The food supply has had much to do with the development of type expressions. The climate plays its part, which is plainly seen in the furs of animals. A cold climate produces finer skin pores and in a like measure finer fur. Man did not develop fur to cover his body,

and in order to survive he had to follow the climatic conditions suiting his development. The result was to subsist upon products that such a climate would produce. In the case of giraffes feeding upon branches of trees, and reaching high up for their food supply, the scarcer the branches became the higher the animal would have to reach, and the desire constantly expressing itself to reach the higher leaf, expended its force in utilizing and developing longer necks, and longer legs upon the individual animals and unconsciously the process constructed longer necks and longer legs upon the offspring.

The crane is also a fair example of how the law of development works. This bird took to feeding on fish. It would secure its food by standing along the shores and watching for its prey, the coming fish. It learned to stand very still, and when necessary to move about to do so with the greatest ease and quietude, lest it disturb the fish. Not that it knew the fish would be frightened away, because it was not a development of intellect, but because the crane that did not use precaution got less fish and could not survive in life, while the crane that did use care progressed under the process of successful supply and lived to see his offspring survive, coming forth with long slim legs for deeper wading and an inherited patience for quietude. It was not a method of intellectual accomplishment, but was the work of the function of desire, to satisfy hunger expressed by Nature's process.

In the case of man he had to secure his food supply by climbing trees for fruits and nuts, as well as defend himself against the common enemy. So the climbing of trees developed his hands, and with development the hand became a feeler as well. His desire for fruits and

nuts alone did not suffice, so he developed curiosity to search in various lines through the process of feeling, and as curiosity was never satisfied until desire was supplied, the function of curiosity took its place side by side with that of desire, and from thence on the mind of Man expanded. Other animals used hands too, and also developed desire, such is the case of the ape and monkey type. But in the latter the characteristics of re-generation was cut out to a great extent because of the fact that the process of curiosity with the short lived animals did not enable the life line of the monkey type to transpose a primary mind of educational capacity; for in the case of the monkey it is but two to four years, while that of man runs from 20 to 50 years.

There is little or no curiosity in other animals, probably for the reason that their sense of feeling was in the nose instead of the paw or hand. The result was, and still is, to a great degree, to leave the curiosity unsatisfied, because of timidity and fear. It was a case of exposure to put the head and nose too close to unaccustomed things, while if they could have found satisfaction in the use of the paw, or hand, the risk would be at a minimum. But Nature provided them according to their own particular line of condition and power of subsistence; they did not develop the safe and easy method of feeling, nor function of curiosity. Without the function of curiosity, the mind is left in contentment, and contentment means mental inertia.

If Man, like the birds or animals, could have clothed himself with feathers or wool, he would be content to just live, but it so happens he was created the most naked of all creation and the most helpless in his aboriginal origin. Along with mental activity came cunning

and cruelty. And as the animal man, he was the most cruel and savage expression in organic life. He was never known to be content with his pre-historic existence, and only tentatively so now. His very existence on earth today depends not upon his generosity, one for the other, but because of the protective influence of seas and islands. For it is prone in him to annihilate all else but his own tribe, and the probability is there has been untold numbers of aboriginal races of man obliterated from the face of the earth, for time after time the yellow race came near annihilating the white man.

The question might arise: Are we not all offspring of a single pair? The answer is, No! Absolutely, No!! Every expression of organic life comes into existence because of a condition, and while we are all relative in the sense that we are all products of the same universal laws and principles, we are not beings of the same type lines, even though we are so closely allied in character as to form a union in re-generation.

To come back to the subject concerning the cruelty of man. His utter helplessness and his unceasing struggle for existence against his common enemy, for ages kept him in constant mental agitation. This struggle developed the mind as it always does, yet there were moments when he saw the light of contentment. It had the effect to stimulate desire for better conditions. He learned that there was something to be desired outside of just the simple food supply. It was the comforts of protection, and he gradually made the effort to clothe and shelter his body. He learned to live. He began to know he lived, and in a degree felt a responsibility. Here is where the embryotic spark of the moral law came into the race, and at this point began the Adamic Man.

Events come and go, and Man for probably three hundred thousand years lived, struggled and fought each other. Step by step he developed a higher mental power. First he communed by gestures and ordinary sounds, then he invented words and symbols, and as each word was invented it had the effect to increase his sense of reason. He had moments of pleasure between his strifes. He saw daylight grow out of darkness, happiness and contentment out of misery. Life became sweeter and dearer to him. He desired to live for the good he saw in life. He at last knew there was something in life to be desired. He knew he lived, and he desired to continue to live, and the desire to live produced the capacity in conformity with Nature's process in constructing the mental combination, the mental body with the capacity of consuming, and with the consuming develop a mental energy embracing the capacity of maintaining an existence outliving its connection with the physical body, that it, in former generations, had constructed to the requirements of conditions and expressed desires.

In the case of the giraffe, its physical body was developed and constructed to meet the demands of the mind, although the giraffe did not conspicuously know it. His mind was only bent on accomplishment. The same is true with the building of the spiritual man. He desired to live, and to continue to live, but knew nothing of a spiritual condition, or spirituality. His whole mind was fixed upon his physical being. He could think of nothing his eyes could not see, or his other sense organs cognize, notwithstanding, he enjoyed life and wished constantly to prolong it. Death was a horror to him. His desires were evolved and continued active and his fear of death kept the desire keen and alert. When death

did cut off his earthly career he still entertained hope that his body might be resurrected and that he could renew a life of activity again. Little did he know that his desire to live was all the while constructing the conscious and mental powers to do so. And why not, since the desire of the giraffe to reach the highest twig to satisfy hunger of the stomach, constructed for him the long neck and long legs, and it was unconscious desire that did it. How much more ought the evolutionary law construct the mind in capacity for a continuity of life when the mind consciously directs its energies to establish the motive of its desire with the direct object constantly in view.

Let us presume for a moment that there is no evidence of a continuity of life, and let us take for granted that the grave is the goal and resting place of every mortal, and that we stand face to face with the fate that awaits us. And what is Nature's answer? The answer is whatever the arbitrary mind constantly applies in time, becomes the law of life. In other words it takes root and lives. Nature's process is constructivity, multiplicity and diversity. And its ultimate results are limitless. When it has the power and capacity to bring into existence a type line and regenerate it down through the ages, it has the same power and capacity to create within the individual a type of the same power and capacity. And this is just what it does. Though energy produces invisible but enduring lines, and lines established is always followed as tracks by energy thereafter. All great things started from an infinitesimal point or center and automatically increased both in quantity, quality and momentum, as they roll on through time. The one thing we must bear in mind is that what constitutes continuity

of life, it not life itself, but organic being, and its continuity is not a question of life but a question of maintaining a consuming power. Awareness does not depend upon the physical body for its perception, although it primarily was dependent for mind perception and mind power now depends upon mental organism and its continual composition and growth depends upon consuming the elements of thought.

We are taught that from the spiritual we came, and to the spiritual we must go. That is true, but not in the sense commonly interpreted. Our spirituality is born out of our parental spirituality and with each generation the spiritual or spiritual man develops union, two in one, or duality. That is to say, the spiritual effort of two parents centers in each of us, and if we are not more spiritual thereby, we ought to be, and there is something wrong if we are not.

Humanity is an outgrowth from the Animal Man. It is the extensive and widening of characteristics to the moral, educational and spiritual Man. We, like the flower, first put forth root, stem and branches, then foliage, perfume and fruit.

Plant fruitage is a continuity of the life line. In the lower plants the root, stem and branch cease to continue further as plants when they condense their energy into the seed. But in the higher vegetable growth the individual tree sends forth its seed while retaining continuation of conscious growth in its individual self. We therefore know of the continuation of the life lines of every specie or character. The only question that rises is, does the individual maintain mental organization and continued self consciousness? The answer is, Yes! We have outlived our primordial cells or molecules, have

outlived our forms of foetal life, our childhood and the continuous reconstructed form that followed, yet we never lose our marks, scars, character or memory. Parts of the physical form, even extending to some of the vital organs, may be separated without effecting the mental organization. There are some animal species in existence, or rather have been in existence, that were able to separate their physical body at will. We have in mind the joint snake in particular which grows one joint each year of its life. The head and body proper begin when hatched from the egg. Then each season thereafter it grows another extension, which can be separated without vital effect, and again assemble to its normal condition.

In summing up the combination of the individual man he is found to be a prototype of his race. First he subsists upon that from which he was created, namely vegetation, either by consuming vegetation itself or by consuming the animals that have consumed vegetation. What he now physically subsists upon is what proves to be the base substance of his primordial origin.

By virtue of the Law of Affinity, protoplasm, or digested vegetation, became the fruitage source of his amoebaic life and his physical body continues to be constructed by that process.

From the formation of amoebaic animalcules ring clusters were organized and united, and by extending in lengths, the rings became tubes, taking in their food supply at one end or the other, one of which assumed the head. And the physical body still remains a tube.

Tube formation taking in its food supply from its open end, consumed all, and eliminated that which was unfit in a manner to set in motion digestive organs, eliminating pores and discharging apparatus. The open

end being the receiving end to supply hunger, in the long ages it had to exist, constantly butted its open end into roots and rocks until it was finally battered into a head. And we find that it is the knocks and bumps that we receive today that still hardens our heads and gives strength and endurance.

All tube life was dependent wholly upon organized amoebic rings. But when the development went far enough to produce the cartilage and hinge, in the evolution of the spine the union of forces, or principle of flower life took place. This was the turning point wherein organic man was enabled to project his energies into another sphere or plane of action. That of union and seed state. Not suddenly and abruptly, but by a slow, tedious process for ages. For in animal life, like that of vegetable life, the flowers co-mingled in beauty, joy and harmony for ages before the intermingling could unite a projecting force to that of re-generation. In the vegetable kingdom the generative function is still in vogue. The tree can be grown both from branch or seed.

Moving organic characters, in order to get about, had to construct factors of locomotion. There were but three ways to do this, which was to roll, walk or hop. The roll process is used in the gross material world. The first method of walking is the worming crawl, or the hop as is practiced by some birds and the kangaroo. At any rate the vertebrate generally cultivated four limbs because a crawl or worming movement cannot be converted into a walking movement without at least a four point contact.

Aboriginal man moved about on four limbs. His digestive organs became accustomed to food supply

furnished by the trees. He learned to gaze upward. He gradually arose to satisfy mental desire. His front feet are developed into hands. In climbing trees he used them constantly; they become his tools of defense, and after ages he arose to his feet to finally walk erect. At first, probably like the child learning to walk, he reached from object to object until his confidence was supported by his capacity to continue that method of walking a custom.

Along with the hardened head and vertebra came the brain and nervous system. Man is also a quadruped. From thence on the hand and brain developed and worked together, as they do today. And here begins the dawn of the Adamic Man.

From the Adamic Man the real mental struggle began. He began to see glimpses of moral perception. The germ of hope, aspiration and desire had taken root, and the animal mind widened out toward a human aspect. He began to feel a sense of right and wrong. But there was still a wide gulf between him and the intellectual man, which for ages—not less than 300,000 years—has struggled for food, shelter and raiment.

The gulf has been one of cunning, greed, treachery, savagry and barbarism. Through all this man has had to come before he could reach the stage of intellectuality. The value of anything depends upon the effort required to produce it. We appreciate happiness by the misery we have experienced. Our joys are measured by the sorrows we know. We appreciate the light when we have seen the darkness.

The mind like every other thing is strengthened by struggle and effort. Its struggle develops the capacity of endurance. The human mind for ages has sent forth

an untiring effort for continuity of life—continuity of consciousness. We know that the desire of mind can construct the physical form in keeping with its demand, and also know that the mental form serves as a matrix upon which the physical is constructed. Since this is true, it is clearly within the province of the mind to construct its own form and capacity within the scope of its own functions and desires, the capacity of perpetual consciousness.

CHAPTER XIV.

FUNCTIONS OF THE HUMAN MIND.

The individual human mind is a unique and extremely intensified combination. It is an organization having departments and form. In fact so far as we know it is the most elaborate manifestation evolved out of the constructive forces of Nature.

The mind is not a principle, but a combination, having functional capacities, and is susceptible to growth and arbitrary powers. Therefore it is a thing of form—a body—hence we call it the mental body.

It also is a thing of dimension; having a center and a circumference.

It is a thing of action and a thing of silence. Its abode is in all the spheres. The imagination is very active and far-reaching, while the memory is silent and fixed.

Being a thing of silent fixity is a material substance. Like the perfume of the rose, though exceeding fine, it is nevertheless matter.

The mind belongs in the category of creation, although in its developed state becomes a creator itself. At first it is automatic, but winds up at maturity with arbitrary power.

Because all matter bears the record of its creation, and maintains its every characteristic in its fixed qualities, many intellectual people assert that this is due to the fact that *all is mind*. But when they make that statement, they do so without thinking. For mind has character and record just as everything else has.

But the mind is more than character and record. Basic matter has one of the functions of the human mind; that function is memory. Beginning in basic matter and going upward through the vegetable and animal kingdoms, there is a state of consciousness. Very little is expressed at first, but always with a higher and higher degree, which also is a function of mind, but here it stops.

There are six grand functions of the human mind, namely:—Memory, Consciousness, Will, Reason, Self Consciousness, and Imagination. The six grand functions are subdivided into about ninety-odd minor functions. In fact as many as there are elements in the material universe of solidified matter.

The first grand function of the mind is Memory, but though a basic function of mind, is not properly exclusive of mind. It is found in everything. In fact it is Nature's inertia; the Soul Principle of all creation. Memory not only records every motion of energy expended, but it records, environs and maintains character, with every thought and action into a formation as the basic part of the individual Soul.

Will is the function of consent that may reverse its expression to that of a negative (will not) and is the first appearance of an arbitrary power within the realm of Nature. Will is a development through the law of vibration, wherein it at first finds modes of expression through the Law of Affinity, as expressed by attraction and repulsion, effecting things with harmony on the one hand and discord on the other, between which the vibrating energy plays, until the consciousness develops to a point of dictation, and while consciousness still remains a factor, the will develops into being, and herein lies the

first fruit or distinctive impulse or function of mind proper. The reason we state that Will is the first distinction of mind, is because memory and consciousness, while the principle factors of the mind, are not in any sense confined to mind, but are to be found as common factors in everything.

Will is the most highly developed in man, still it is not an exclusive function with the mind of man, for we find it expressed all the way down the animal kingdom. The higher types of animals have an expression of Will, and make their choice of movements along the line of mental directivity, and this continues all the way down until it loses its function in the environment of automatism, exemplified in the movements of the angle worm, or the Amoeba, which moves to satisfy hunger by being attracted toward that which will satisfy hunger, and to be repelled when supply is attained. A step further down the scale of development and we reach the vegetable types that feed upon animal forms, known as the carnivorous plants, and from the carnivorous plants to that of the sensitive plants, that are not attracted to any other thing, but are repelled when they are in any way in contact with animated forms wherein they manifest a degree of Will in expressing self preservation.

The higher aspect of Will reaches a stage of arbitrary directivity, but is not to be found in Nature outside of the mental world, not excepting the universal intelligence which acts only from the source of the fundamental and cosmic.

Where the Will is the highest function of the mind, it cannot be said that such mind possesses the quality of equity or justice, but is rather the element that moves to satisfy greed and personal selfishness. The Will

therefore knows no feeling for others and does not in the least show a sense of relationship to that human expression, the moral law. The person who has no greater function than Will has not attained the state of moral development, or could he in any sense become cognizant of the Spiritual Man; the line of destiny lies before him.

The function of Will must necessarily play between harmony and discord, pain and pleasure, for ages and generations before the consciousness can develop the capacity to send forth the germ of a new and higher function—that of Reason.

Reason is purely a property, as well as the highest function of the individual mind. We can trace Reason down through the type of man and into that of the higher animals, until it ceases to exist entirely. And when Reason fades out, along with it goes every trace of the moral law. We have been taught that Man is the only being that possesses an independent Will, and that to man alone is confined the moral law. Yet it is easy to trace Will down into the animal kingdom, as well as along with it, traces of the moral law. We notice the stubbornness of some animals and the moral strain in others when they express a sense of embarrassment or shame.

The Will is an important function of the mind, but when Reason becomes enthroned as a directing factor, a rapid process of a higher development follows. Reason is the highest moral function and purely a property of mind. With Reason enthroned Man becomes the arch type of Creation with unlimited possibilities.

Reason is the directive agency of the function of Desire, the greatest function of mental development, the

arbiter of the moral law. It is the fountain head of the Spiritual Man.

Side by side and in unison with Reason the function of Awareness, or self consciousness, is developed in Man, and to man alone does this new function become a source of mental directivity. Self consciousness is the source of many of the preliminary functions of the mind, which we shall hereafter mention. In itself it becomes and is the germ of Desire for a continuity of life. And to it more than any other source is due to a mental, moral and spiritual development.

Imagination is the most active function of the mind and is the forager and garnerer of mental conceptions. It is not limited in its action, like that of Will and Reason, and is the direct opposite function to that of Memory. Imagination is mental activity. While Memory is mental silence. One is a generator, the other a receiver and retainer. Imagination moves, Memory does not move. A thing that moves occupies greater space than a thing that does not move. One must therefore occupy space while the other occupies a circumscribed center. Thus a thing having a center and a circumference, has form, and a thing of form, is a thing of materiality, which in its very nature must have a body though its component parts are matter of exceeding fineness. Properly speaking it is our Mental Body—the indwelling Soul.

The Mental Body has a combination composed of six grand functions. It is like that of the physical body, a grand complication, and like the physical body is constructed and maintained by the power of consuming. In the case of the physical body it is constructed and maintained by consuming solid food, water, air, ether, etc.,

and from the consuming of these elements, which through the process of digestion are transposed to energy, which in turn is suspended to matter of the component parts of the physical body. The same process takes place in constructing the component parts of the mental body. The energy that the mental body consumes is suspended to the construction of the mental functions, thence the functions construct the mind proper. Imagination gathers the thought energy, Reason digests the thought energy which is conveyed over it in word formation, and then suspends its force into the sleep state of the mind—Memory. So it will be seen that mental energy builds mental forms. Differing in fineness as they differ in planes of existence. In other words, thinking is the process of constructing the mind. The mind itself is a combination—a storage of recorded events. While the functions of the mind are refined it is a gigantic mechanism, composing the six grand functions and some eighty odd allied functions, some of which are constructive and others destructive.

In the following exhibits, 1, 2, 3, and 4, we outline most of the mental factors of the mind, arranged in their order of importance.

THE HUMAN MIND.

Exhibit 1.—Grand Functions of the Human Mind: Consciousness, Imagination, Will, Reason, Self Awareness, Memory.

Exhibit 2.—Constructive Functions of the Human Mind.—Apetite, Curiosity, Intuition, Aspiration, Hope, Faith, Impulse, Patience, Cunning, Greed, Courage, Kindness, Courtesy, Compassion, Sorrow, Pity, Sym-

pathy, Reverence, Discretion, Honor, Personal Responsibility, Moral Accountability, Desire, Love.

Exhibit 3.—Destructive Functions of the Human Mind: Anger, Revenge, Hate, Envy, Animosity, Bitterness, Impatience, Mistrust, Fanaticism, Apprehension, Timidity, Shyness, Reverential Fear, Awe, Consternation, Suspicion, Indignation, Jealousy, Disloyalty, Self Pity, Dread, Dispondency, Exasperation, Dogmatism, Fury, Rath, Fear, Cruelty.

Exhibit 4.—Moral and Spiritual Functions of the Human Mind: Intuition, Aspiration, Hope, Desire, Faith, Patience, Courage, Kindness, Courtesy, Compassion, Sorrow, Pity, Sympathy, Reverence, Love, Personal Responsibility, Moral Accountability.

The human mind is a wonderful and unique mechanism having its central "I Am" and its six cabinet official functions, with over eighty subsidiary departments, making up a complete organization.

The Will is the dominating factor of the I Am, and it is within the province of the Will to set in motion any function of the mind. It is therefore through the direction of the Will that the individual mind can be constructive in building strong mental forces, or it can be directed to undermine by calling into activity the function of destruction. All of which comes within the Law of using and abusing.

Every normal mind has all the functions and contains a full and complete category of all the human and mental characteristics. Some functions are more active than others, and at times appear entirely absent in some personalities. In each case, however, every function may be brought out, or kept suppressed. It is a case of holding them in the sleep state or awaking them to activity.

For within the primary mind all functions are enveloped within the sleep state, in dual essence.

Each and every person has within him the power to call into activity the functions of educational, moral and spiritual development, or he can suppress the functions of the higher development and call into use the functions of destructivity and gradually lower his mental and moral personality to any depth that a continual practice is sure to bring. The individual is largely a victim to the faculties and tendencies aroused by inheritance, awakened by prenatal influence, which require the greatest care, patience and practice to overcome, but where this influence is not active the individual can readily follow the dictates of Reason and thereby govern the Will toward the purely constructive lines. Every normal individual is the savage and saint, the criminal and angel, the ignoramus and the embryotic Master Mind.

The Will is a good servant when directed by the function of Reason. But Will once establishing a precedent, does not readily yield to Reason. Rather Will tries to persuade Reason to conform to its plans, and the average person tries to make Reason conform to Will. They have not learned that a wrong process, although temporarily agreeable, must be retraced and rectified. Reason to be at its highest must be based upon equity. Reason like the golden rule is flexible. It rises or falls in keeping with the standard of moral development.

The Mind when properly directed has a force greater than we at first thought will concede. The Mind focused upon a specific line can be projected to a great distance, as is practiced in telepathy. It has a wonderful potent force, one mind over another, as in the case of

hypnotism, which in most cases is by common consent to the operator by his subject. When carried to extreme cases as in producing cataleptic sleep, not only the mind of the subject is placed in abeyance, but the physical body as well.

Subjects at times have been locked under a vice-like grip for days at a time. In other cases the nervous system is completely locked up, and the mind of the subject left wide awake, enabling a surgical operation to be performed, without pain, the sense of feeling, or the loss of blood.

The Human Mind is not alone remarkable for its powers, these qualifications are expressed as well by the lower animals. Snakes can charm birds and draw them within their grasp as mental victims. This same mental power is expressed by the cat kind.

Birds practice telepathy, more perhaps, than any other type expression. They can always trace, each, their mate or offspring in the forest though miles apart.

Carrier pigeons may be housed in darkness and carried hundreds of miles away from home; and when turned loose will rise in the air, circle around a few times until they get the line of mental bearing, when they strike out in a straight line for home.

How can they do it unless by the mental powers?

The honey bee flies from flower to flower and when loaded, circles around until she gets her mental bearing and starts for the hive in a "bee" line, guided by the mental power within.

The carrier pigeon has the sublime mental power to find its home without chart or compass.

The blood hound can follow the foot impact of the culprit through the magnetic energy exhausted into the

soil walked over as long as three days thereafter. Not by the sense of smell, as the world generally believes, but by the soul, mind or sense it possesses. If the hound was guided by smell, how should he be able to follow the foot by the smell of the cap, glove, or handkerchief, in lieu of the sock or shoe of the foot he was expected to follow? If smell was the guiding line of the hound, instead of his psychic sense, he could not find his culprit across lots as is often done by way of short cut, neither could he know the difference of a back track from the forward track. Furthermore how can smell be produced by walking on the earth?

The truth is every step we take, we exhaust energy into the soil we walk over. The energy expended carries with it the character of the person expending the force and the blood hound comes enrapport with this character in a mental line, or soul sense, and in the mind's eye practically knows the personality he seeks and straightway leaves the trail for a short cut across lots where he usually comes across the one pursued and hangs fast to him.

The psychic evidence of the hound is more potent in a criminal court than that of the evidence of a human psychic.

The highest mental sense of animals, which is neither sight nor smell, is an inherited psychic force that is often demonstrated where the animal approaches danger—not immediate danger, but a feeling of an inherited danger. Who has not seen a horse become frightened when approaching an elephant the first time, although the horse could neither see nor smell the elephant? Even though he could smell the elephant, why should he fear danger through a smell that never had hurt him?

Human beings often sense danger, outside any function of the five senses. And in view of the fact that mankind has a higher sense perception than any other animal he should have the soul sense better developed than that of any other animal. This would be the case if he had not abandoned the natural and resorted to the artificial methods of doing things. For in the using of a thing it is developed and in non-use it goes into extinction. Instead of calling into action and thereby creating the finer senses of the soul, he resorts to chart and compass.

This wonderful mind we possess has not had consideration given it by the people in general. Their attention has been directed to their physical bodies. Most people speaking of themselves have reference to their physical body, which if they would only stop to consider would realize that the body is undergoing so rapid a change, that they do not possess the same body in its entirety any great length of time.

When we think of our mental body we must consider it as a primary dual mind, impressed through our parents upon a single molecule. Then we must think of it as it automatically developed a physical form in its embryotic stage before birth. From birth we must think of it as a dual conglomerate mind, a center of perception where thought after thought accumulates in the construction of individual mind around that center of perception. Then we must think of our mind in the child body. Following the child to the matured body and finally to the body of the aged man. But all these bodies with the one and continuous mind from the primordial molecule to the final separation of its last physical form is a continuous one, which having separated itself from

all its past physical forms must also separate from its present.

The mind has separated from all its former physical forms without loss of mental combination and organization hence it is capacitated to mental organized continuity. Furthermore being an inheritance of continuity has the characteristics of continuity established within.

All physical forms take on their characteristics. So also does the mind that lives in and through the physical, which finally buds and branches out into a higher plane like the perfume of the rose, invisible though nevertheless real.

The physical form was builded to suit the demand and uses of the mental form within. The mental form is the proprietor of the physical.

The proprietor, or "I Am" within, is the center around which all the functions, both mental and physical were builded. A center cannot be created, but is a principle of the absolute that exists wherever formation takes place.

♦The center is the base of energy and point from which executive orders are given. At first it was the base of material construction.

The mental center has its mental organs which act as the matrix around which the physical organs are constructed and the mental directs the physical.

The mental brain fills the physical brain and acts as the triggers to set loose the storage energy of the brain that flow down over the nerves filling the muscles and compelling them to move, at the directivity of the mind within. Thus it is that the "I Am" within bids

the physical form to serve it, and expresses proprietorship over it.

This, however, must all be accomplished by proper conditions. We note that mind cannot move matter of a different plane than its own. Hence in order to move physical matter such as composes our physical body, the mind has first to act upon mind body and the mind body is capable of setting at motion matter of its own plane such as that of ether under a temperature of 98 degrees Fahrenheit. A lower or a higher temperature would prove futile.

The physical brain is a storage battery with the stomach and lungs generators and the mind within the chief engineer. When the engineer turns loose the electrical storage it passes down over the nerves filling the muscle to which it is connected and causes expansion of the muscle, and hence endwise shrinkage, and its desired effect is produced. The fluid that acts when the triggers are mentally touched is that fine ether substance that fills the immensity of space, and that portion that acts upon the muscle must be of the given temperature as mentioned above. In the case of cold blooded animals the mental forces operate with a temperature of 65 degrees or less.

It may seem strange, but try as we may, the mental energy cannot move ether out of its storage to operate a muscle outside of its normal working temperature.

Appetite is the function that constructs and maintains the physical body. Desire is the function that constructs and maintains the mental. Desire is mental appetite. Thoughts to the mind are like morsels of food to the physical body.

In order to construct the mind, thoughts are as mental

food; they must, like physical food, be digested before they can be utilized in the building and maintaining the mental body. Desire is the appetite, Reason the mental digestive organ. The mental body, like that of the physical body, partakes largely of the character of the food it assimilates. Thoughts, therefore have their relative characteristic bearing, in constructing the mental character.

The mind, like the physical body, in order to grow must consume its food supply or remain at a standstill. Then if you desire to move, grow and advance you must consume and utilize the substance that feeds in either case.

The mental body grows along with, and within the physical body. You cannot see it, but it is there in all its glory. We cannot say the physical created the mental, although it basically depends upon it at first, after which, like the hand and brain, they develop together, with the mental finally outliving and predominating the physical.

The mental body at first depends upon the physical body. Later on when mental organization is complete, it directs the physical, and lastly when separated from the physical, leaves it a cold and helpless form.

He who thinks himself to be a physical form, overlooks the fact that in death, so called, his thinking, vital and active forces have simply taken birth into another plane to which it has developed. The physical action ceases at the departure of the director. It is not at all strange, for Nature's Invisible Forces are working by this process in every plane of existence and every stage of development. For out of the carbons came the vegetables, out of the vegetable the animal and out of the

animal the mental, and out of the mental the spiritual. Each step, each plane more and more independent as they become less and less dependent.

It will be noted that the physical body does not live by consuming minerals. Nor does the mental body live by consuming vegetables. But by thoughts. Its continuity, therefore depends upon its capacity to maintain organization and through that organization the power to consume thoughts.

The mental body has formation—its Reason and Will with Memory as its center and Imagination as its illuminary surface—yet it cannot be measured by a square or rule, but by another and different dimension—a measure of consciousness.

The nearest conception one may have of form in the mental body would come in observance of its accustomed use in physical directivity. Mentally we are as we think, and we think we have head, hands, feet, etc. Then it is quite natural that we should mentally retain this form. The physical form is builded along the mental desire and physical application to get the necessary locomotion and carry out the mental and physical activities on this physical sphere. When there comes a separation of the mental body from that of the physical, the natural thing would be to maintain its established form and cling to its established form until a change is required or the lack of a demand places such form into non-use. The result then would be to gradually change form to suit new requirements as has been the process throughout the growth and development of all physical animated life. But when changes are made they never fail to keep in rudiment, the records of their past.

Under Chapter XV., "Arts and the Moral Law," we will try to elaborate upon the mind functions more fully. But since this chapter will be incomplete without giving the functions of the mind in detail, we will briefly touch the question concerning the differentiation of the varied preliminary functions of the mind and their uses and effects.

The six grand functions have been pretty well covered already, and we will now call your attention to the subsidiary functions, all of which are largely under the dominion of Will and Reason. Mental appetite is the Law of Affinity expressed within the mind, it hungers for thought food and thinking is digesting. Mental food—Curiosity—is unsatisfied mental appetite. Intuition is the sense of feeling or impression from without. Aspiration is a mental gaze toward higher light. Hope is the line toward a thing sought for, Faith is to believe the thing will be attained. Impulse is an expansion from within. Patience untiring energy. Cunning is the effort to evade, Greed is unbridled avarice, Courage is energy expending without fear. Kindness is harmonious equity. Courtesy is extending privilege to others. Compassion is extending privilege and sympathy. Sorrow is mental distress. Pity is the hope it should not be so. Sympathy is extending the hope with feelings. Reverence combines Love and Honor. Discretion is to use mental analysis. Honor is steadfastness to what seems right. Love is to revere and adore. Desire is the function of inspiration. Inspiration harmonizes with the forces from without. Personality as a whole is the mental reservoir of known responsibility. Morality is the recognition of spiritual development and accountability.

The using of the above subsidiary functions means building constructively in the individual mental and moral personality.

The use of the following named functions is to encourage mental and moral degradation.

Anger poisons the mind and body. Revenge cultivates and perpetuates the diseased condition that Anger establishes, hate cements and seals the disease within revenge and cultivates and encourages it to live. Envy is enmity and selfishness; it destroys generosity. Animosity causes mental sourness. Bitterness foment the mind. Impatience weakens the nervous system and destroys the judgment. Mistrust destroys faith. Fanaticism is biased judgment and a curtailment of philanthropy. Apprehension is the forerunner of fear. Timidity is yielding to mental weakness. Shyness, effort to avoid. Reverential fear creates hypocritical love. Awe, mental shock. Consternation, yielding to fear and abandonment of judgment. Suspicion, questionable attitude. Indignation, pride and disgust. Jealousy, selfish honor. Disloyalty, instability. Self Pity, is moral suicide. Dread leads to moral weakness. Despondency destroys hope and leads to mental collapse. Exasperation cultivates meanness and loss of judgment. Dogmatism leads to mental inertia. Fury is **distructive** to reason. Wrath starts a mental cyclone. Fear creates personal weakness and Cruelty destroys spirituality.

Man's greatest hope and accomplishment lies in the proper uses of the constructive functions. For man is as he constantly thinketh. Intuition, Aspiration, Hope, Faith, Patience, Courage, Desire, Love, Kindness, Courtesy, Compassion, Sorrow, Pity, Sympathy, Honor and

Reverence is the functions that when made use of create a moral and spiritual development.

In concluding the subject of the Human Mind we wish to give it a somewhat broad survey.

Starting at a point of perhaps a grunt or mere squeak, humanity has developed a vocabulary, including the whole race, of not less than three hundred thousand words.

The average man intellectually uses from 300 to 1000 words. The business man not less than 2000. The professional man 7000 to 10,000 in order to clothe his mental expressions. Man has not only got to have words to express himself, but must know them and use them in order to think.

The world is coining words at not less than 40 per day. So the mental world is growing and thinking. To use words without a knowledge of their meaning is like eating food without digesting it. It means mental dyspepsia. A healthy mind means the capacity to use and properly apply words within their correct meaning and bear thoughts of concrete understanding.

The pre-historic man used little or no words at first. Every word now in use can be traced to its root in a form of its first mental meaning. And so we note with accuracy the long tedious process that the human mind has been evolving into being, how line of contact with objects produced mental thoughts, and the thoughts clothed words, one after another, until the almost limitless mind and vocabulary of man has become the key-stone to the arc of earth-plane creation.

The human mind has the power to construct invisible though over potent lines which mental energy expresses. Although we may not know it these lines are tracks that

we actually create, "for as a man thinketh, he is." A desire constantly pressed and expressed for health lays lines over which energy will be able to travel and express health. The expression of self-pity is moral suicide and is a fertilizer to the mental or physical soil over which the mental lines are laid. If the expression is continued long enough it becomes a growth of reality to its owner who hugs it to his bosom, the property he creates as his own.

To think dispondency is to cultivate it: to think suicide and think it often is to lay suicidal mental lines; to utter it in words is to make flesh of it, and when one least expects it and the occasion arises, the mental explosion takes place, the energy passes over the line of least resistance and he becomes a suicide.

Think kill, think it often, and one will mentally lay the lines to perform the act. Express kill in words and we indelibly lay mental tracks that in a brain-storm explosion the mental energy will express itself over the tracks laid and before a better judgment prevails one may have killed one's best friend. This is the power of the mind for good or ill. Let each human being be taught the truth of the creative power of the mind, and with this knowledge profit by it rather than suffer the excruciating agony that misguided thinking may lead to.

CHAPTER XV.

ART AND THE MORAL LAW.

In considering the subject of Art and the Moral Law we must ever bear in mind that they are the result of mental conception, and must not be confounded with Nature's Laws. They belong to the world of things, not sources of causation.

Art as well as the Moral Law depends upon Nature and the mental world. That Nature is not dependent upon them or is it in any way essentially connected. Nature's Laws existed prior to Art and the Moral Law.

We are endeavoring to impress this thought upon the mind of the reader, for the reason it is a common thing to have educated persons speak of the subject of the Moral Law and confound it with Nature's Laws.

Nature's Laws are casual and fundamental fixities, without beginning or end. The Moral Law is comprised of the ideas and mandates of the mental world. The Law is conceived in the mental world, is changed or annulled by it, and like the golden rule, rises and falls with the highest concepts of its possessors. It is humanity's flexible rule of practice.

Art and the Moral Law conditions a plane for man above the line of the lower animals. And just to the extent we abandon Art and the Moral Law, do we ally ourselves to the animal world beneath us.

Although mankind in the highest sense is the possessor of Art and the Moral Law we must not overlook the fact that it reaches a considerable distance into the lower animal kingdom.

In order to treat the subject intellectually we must first define what is meant by Art and the Moral Law. Art is anything expressed or implied by mental directivity. The Moral Law is the mental sense of justice, expressed and implied. It is a sort of fourth dimension. A measure of and an expression of consciousness.

The expression and implication of mind can be done only through the functions of the mind. The principle functions are Will, Reason, Perception, Conception, Imagination, Consciousness and Memory.

Most of these mental functions are traceable down into the animal kingdom. For instance the horse is said to possess horse sense. It feels a sense of right and wrong, some have good characters, others bad. They all possess a certain amount of Will, sometimes even to be very balky. They have reason which they readily express when they become frightened and after finding that the object that frightened them was only a stump, they reach passivity and are satisfied.

Dogs have faith in and love their masters, and a deep sense of moral principle of right and wrong as they readily express in shame or glee.

Beavers have the sense of art and their needs when they build their dam across a stream, plaster it with mud and riprap it with sticks of wood and stone.

Bees build their combs of wax cells in which they hermetically seal away their honey. They construct their cells on plans of geometrical law, by making one cell and six other cells around it, forming complete adjacent circles within dimension of space.

Birds build their nests with sticks, mud or anything to which they form a habit or fashion. Some birds sew leaves together as a tailor would do. Most birds sing,

giving mental expression to moments of pleasure. Some birds mock every other bird of song, while other birds actually talk.

Monkeys play tricks upon each other and do all manner of stunts in order to draw attention. Monkeys have been known to construct bridges, ride on bicycles, roll balls, play cards, smoke a pipe, as well as sometimes express sense of shame.

We personally witnessed a bunch of steers form a conspiracy and collectively drive another innocent flock through a fence that they might get into a neighboring corn field.

Most all domestic animals speak some words of their own which have mental meaning to them, and in which they each can understand. Nearly every animal has gestural expression and emotion.

Humanity is not the only living thing expressing mental directivity or art and the moral law. Although they exceed by far every other living character.

Good and evil, right and wrong, is purely a concept of relative mind. It has no place outside the moral law, the whole of which is but a mental sense of justice while the process of Nature is in constant progress to perfect adjustment regardless of what we may think or do. The pendulum constantly swings to and fro with a perfect stopping point in the center.

Our ideas of right and wrong are from our own mental viewpoint, and what we do not want to be done to ourselves, our moral sense teaches us, to not do to others. It is like climbing a ladder with the upper rung just above us, which when reached gives us greater view of the mental horizon with always another rung still a step higher; for each rung of the ladder we climb, our at-

titude changes, and what is good today may seem bad tomorrow.

There is a tie in the Moral Law that binds all mankind together. Usually man-made laws are no better than the people that enact them, and it is certainly true that the people in a general way are no better than the laws by which they are governed. While this is specifically true in national affairs, with our present facilities for news and travel, and international relationship, it is general; so that, like persons of evil intent can disturb a community, nations of bad laws and evil intent can effect the world at large.

So it is if one nation be possessed of the most noble quality and highest sense of justice, it cannot always deal in harmony with other nations unless they be of the same moral standard.

Usually when there is trouble between nations as between individuals, the imposing one has the lowest standard of morals, and there is no such thing as raising the standard in that time of dispute. The result is the one possessing the highest standard must drop down to the lower, for there can be no settlement in language the offender does not understand. To look for reason where it does not exist is wasted effort. So if the one knows only shot and shell in a settlement of dispute the other must meet them on common grounds or suffer defeat.

The question under a moral status is how to avoid individual or wholesale crime. The world has usually consented to wholesale murder and looked upon individual murder with horror. The question of moral status is altogether in the motive. If the nation protects the individual he need not resort to crime. And

where the moral status of nations are established on grounds of equity, justice and reason, nations will not need resort to wholesale murder. The latter will take place when reason, instead of will, is enthroned. Will is the function of might and under the dictum of will, might is right. How then can reason deal with will? Simply by providing might to counteract might. So it is that a nation possessing will and might, whose language is shot and shell, must be dealt with through shot and shell.

Humanity today, regardless of the fact that we have a conception of morality, has not as yet enthroned Reason. When a child we were taught that one vicious animal could start a fracas in a whole flock. This story is made plain to us when we see two nations indulge in a fracas that finally involves the whole world.

It is not within the choice of man to say we shall have peace until the morals of the world shall be determined through the expression of Reason. The route mankind is traveling is from the animal mind to the spiritual mind and it is a long, tedious struggle. It is a process of intellectual development. It does not come up spontaneously and everywhere alike, but grows in individual minds and patches.

The intellectual must rule the ignorant, or those who have no intellect, and that is to be expected. But when intellect rules it also becomes selfish, and as the mental world grows it must set aside selfish rulers, even though they have surrounded themselves with military power. For the world must grow and cannot be stayed. The moral canker must be cut out, as with the surgeon's knife. To do so the moral law must cut through healthy flesh. The sentiment today prevails, that neither man

or nations shall be immoral, inhuman or barbarous, even in self defense.

A people of a nation have a perfect right to form such government and make such laws as the majority of the people thereof may agree to, but if their government and laws become a menace to the progress of the world at large they are no longer within their rights. Here is where mankind as a whole must weed out such nations, even though they have it to do against the wish of the people who in their ignorance stubbornly fight to maintain their own incarceration.

Art, the work of mental genius, is the effort of mankind to supply personal requirements and comforts. Just to the extent we advance in the moral laws and arts we depart from Nature. The laws of man are but the mandates to protect him as he lives in an artificial world. And as a matter of fact no law is a just law that does not conform to the establishment of the greatest good to the greatest number. The selfishness and mental cunning is always alert to seek personal gains at the expense of others. Hence it is that every statute book, the world over, is full of unjust laws, as well as the fact that there are always a class of people directly and personally interested in their own selfish gains, and those through favoritism who will lay down their lives to maintain injustice to the masses as of divine right for a few to arbitrarily rule over the many. They have reason, yes, but they bend reason to conform with their will. So that in order to meet the world's requirement of moral status, it must be in conforming affairs in the interest mentally and physically of the mass of the people as against the interest of the few.

There was a time when one could commit a crime

and atone for it by settlement in the third person. There was a time when man had to pay his personal debt with his own flesh. There was a time when it was right to sell spoiled meats to people afar off. There was a time when it was considered right to collectively raise a mob and plunder a foreign nation for its spoils, and was justified in placing its victims into slavery because they resisted. There was a time when one nation could overrun another and if resistance was offered, terrorize them by burning their cities, taking their leading citizens to firing lines and shooting them in cold blood. If the populace objected they would imprison their most beloved as hostages for good behavior in submitting to servitude and the payment of heavy indemnities for the cost of their own outrage and for being so impudent as to offer to defend themselves.

But that day is passing by. The evils of the one age become the virtues of the next, as the darkness of the night contrast the light of the day.

Art and the Moral Law must always work hand in hand, as it has in the past with an ever evolving effort to the good of man.

Art to supply the personal needs, and the moral concept to meet out equality and justice to all.

The highest concept of the Moral Law is the accomplishment of the greatest good to the greatest number, and in an individual way the personal responsibility and moral accountability of every child of Nature.

The gulf over which mankind must travel from the animal man to the civilized man is a gulf of barbarism. The potent factor of the civilized man is Art and the Moral Laws, and neither Art or the Moral Law can be evolved faster than the race itself. Hence it must come

gradually and by personal and collective effort, just as intelligence dawns, it asserts its right over ignorance and usurps its power. It centralizes and organizes itself into power and control. Selfishness and pride dominate its whole being for it is impossible for the age of centralized intellect to see the civilized motto of the greatest good to the greatest number, and fights all such human advancement by its self styled divine rights to the very death.

War is one of the arts of human genius. To the moral mind it is hellish, because the moral mind feels that all disputes can be settled by reason. But when combatants of contending nations do not both alike have the function of reason, how is reason to be used? It simply cannot be used when it is not to be found. What then happens? The nation possessing reason must see that it has to meet the combatant from one of two standpoints, namely: Either to abandon reason and use will and might to protect its rights, or submit to the will and might of its selfish enemy and become servants under them. In other words, stand idly by and allow the evolving light of reason and intellect to be crushed from the hopes of humanity. It is cowardly to surrender reason and intellect to will and might; and even more, it is immoral to not defend in any and all advance stages of civilization and the moral laws.

War is not a crime when used as a weapon in support of the right. Not what strained reason would suggest, but the rights expressing the greatest good to the greatest number.

Most wars have been in support of personal aggrandizement, the struggle of the individual to curtail the onward march of the mental world. The self chosen peers

of authority have always laid down their creeds and plans with hands of restraint to progress, which served as dams to the stream of progress, that curtailed the stream until its banks overflowed, sweeping everything before it. Such has been the experience of mental growth in the world, until now the world asserts itself against further checking by placing reason upon the throne of authority and with it fight the final battle of war against wars.

When that time comes, as it surely must, the moral law will find its expression in a central head, as the voice and choice of the whole people and whose mandate will be expressed and determined in the battle of reason, wherein the vanquished as well as victor will alike be benefited.

It was a common thing in years gone by to find in every community an individual possessing more strength than others of his neighbors, and this overbearing young man was usually called the bully of the neighborhood. But when art produced the pistol, it put him out of business, for the little fellow had a chance, and the death-dealing pistol civilized the bully.

War in action does not exhibit all its terrors to view. Hatred that is generated and which follows does mankind an untold amount of injury by burning out the kindred relationship one people should hold unto another and more particularly is this true where the struggle was not for humanity and the right.

It so happens that Man came into being the most helpless of all creatures and being the most helpless, his needs in a like measure the most far-reaching. Had he been amply clothed, he would not have needed artificial shelter. Had his appetite and digestive appa-

ratus been capable of surviving on weeds or even grass, his struggle would have been exceedingly small. He would not have cultivated selfishness from which he, in his higher aspect would have to break off. If his lot had been a state of full and complete satisfaction his function of curiosity and cunning would not have been aroused. For perfect contentment would be perfect stagnation. But this was not the case, for he found himself in constant nakedness and want. To satisfy those wants he had to move. To protect his body, he had to shelter it, and to do so by an act of the mind, for there was no other way. An act of the mind carried into execution is an act of art. It was not essential that he should spin and weave a coat, but even the skinning of an animal and the donning of that animal's coat was an act of art.

Before mankind could have performed the cunning act of covering his body with the skins of animals he must first conceive the idea, and it was to gratify the demands of this first idea for satisfying his needs that he started out of the animal kingdom toward that of Man. Little as this first act was, it formed the central spark that lit up the way, step by step, until man has become a master in the expression of his desires, from shelter of his coat to his magnificent mansions and temples that followed. But by the effort of his ceaseless inquiry and the work of his tireless hands he has directed nature itself in supplying his endless appetite for food, as well as the process of cooking same to practically digest it before eating. Not alone content with shelter and food, but his mind has so enlarged that he coined hundreds of thousands of word symbols in order to record and convey his thoughts as well as

the marvelous scheme of printing and publishing—the art of arts—or art preservative of all arts. Beginning in the small first needs for a coat to shelter him, his hand and brain has worked out the marvelous commerce of the world, till we float upon the water, travel beneath it, travel upon the surface of the land and tunnel through it, as well as fly through the air. We talk over wires and talk over space without wires. Think what we may, prophesy what we will, and abide the time, for the destiny of man will answer the demand in the fulfillment of every ideal.

Necessities are demands, and demands create action which means growth and results follow. And by the process of evolution the building of the tomorrow on the today, makes for each decade a larger growth, and its pro rata of advanced speed. So it is truly said that the last 25 years has advanced the world more in art and the moral law than any previous century, and the last century has advanced the world more than all the ages of the past.

Individual development, like universal development, must be gradual with an ever-increasing capacity and volume. As the mass depends upon the units, we feel it essential to deal with this phase of the question in detail.

Collectively, the highest Moral Ideal is "The greatest good to the greatest number." Individually the highest ideal means "Personal responsibility and Moral accountability."

We must each learn that it is impossible for us to have our own way about everything in life. Indeed, we should be quite content if the majority of events turn the favorable sides toward us. When we have

learned these truths our route through life will be made smooth indeed. If we ask our own way regardless of the rights of others, we become moral thorns and find ourselves entangled at every turn of the road. A life thus lead profits little to the individual directing it, and abides no good to the antipathy it meets.

The knowledge that we have success, with the majority of events coming our way is to possess the key to happiness. To know that the world does not owe us homage is a safeguard against personal demoralization.

In the broadest sense, the greatest advantage is, by consent, to the will of majorities. Each one should approve the method that provides it, and be patriotic to their own country. Not that their own country is always right, but because it is nearest and the most vital to them. Patriotism in the past has been to love one's own country and despise all others. But as the whole world becomes more and more united in the common cause of humanity, the despising of other nations will fade, and the final motto will be: The world is our country and a perfect humanity our ideal.

Give to each individual the intellect, the art and morals of the world, and you give to that individual the Master Mind. Strip him of his intellect and of Art and the Moral Law, and he becomes a naked helpless form. Take from his vocabulary of speech, his words and symbols, pictures and mental ideals, and at once he is an animal man.

All normal individuals have within themselves the character, combination and power of expressing life. They have the power of directing their energies to a destiny of their own choice.

We must learn that each individual is the embodi-

ment of bad as well as of good; and that the desirable can be developed and the undesirable kept in abeyance, that motive becomes the all-important question in the thoughts and actions under the Moral Law.

The highest sense of morality is not in the act of doing right because of the fear of punishment, nor is it to be condoned for its anticipation of reward, for the truly moral fort lies in the motive of the act rather than its hopes and fears.

Being good because we fear the result of doing wrong will bring punishment is not a true moral act, because the restraint is made by an outside safeguard. Being good for the thing itself, and because it is good to be good, and right to be right, is a fitting choice. It is expressing a moral motive itself. The culprit behind bars can do no wrong, for the bars defend him. The defense is a physical, not a moral one. To test the moral character is to have the restraint within the character itself. It must first be tempted to test the moral strength. Like a machine, it must be tried before its qualities are known. To stand in fear of the pain of the lash may prevent an act of evil, but the good it accomplishes is artificial restraint and lacks the moral motive.

Every thought and every act one has, goes into the personal character of that individual being. It all becomes an integral part of self. It is easier to cultivate the good than it is the bad, because to practice good deeds breeds contentment and happiness, where the thinking of and doing evil things creates mental discord, doubt and fear; all of which goes into our personal make-up as an indelible fixity.

The idea that one can think wrong, act wrong and

commit evil against others, and then get forgiveness, as though the thoughts or acts were never committed, is mental deception, a thing not supported in Nature anywhere, for continuity is the Law of Life. There are no arbitrary laws in Nature to select the good from the evil and annihilate one and save the other, for all alike conforms to Law by materializing into character and record of one's self. Therefore think not of, or practice the act that you will not enjoy in memory. For each and every individual must constantly pass judgment upon his own personal makeup, and he shall be either proud or ashamed, as his consciousness enlarges, and he reviews his own memory while he is absolutely helpless to in any manner change it.

In the weakness of our intellect, we can pass over wrongdoing without question. But when reason develops, it is a sun of light unto itself that illuminates the dark spots of life, over which we ourselves must review and render judgment as our mental capacity grows. And there will be no way open in which we can get around our own selves.

We are constantly reminded that the worst of crimes are committed by intelligent or educated people. That they are shrewd and cunning, therefore better able to commit crimes and avoid the consequence.

Let us examine the case from a scientific point of view and see if the statement is true. In the first place, we all agree that nearly every crime is planned in secret, and all being done in secret, therefore no one outside of themselves will ever become wise of their game or discover the facts. Secondly, that usually criminals believe that they can become forgiven for any crime they commit, and even though they be detected, that

their case will not be hopeless, and that in some manner the bankrupt court of heaven will discharge them for all evil they have committed, by the simple asking.

In the first instance, one cannot concoct a wrong or commit the act without knowing it himself. If he knows it, which he does, he had the thoughts and deeds recorded in his own memory—his own Soul. And there it will remain, and although he personally may not be imprisoned, he nevertheless becomes a self-convicted criminal and imprisons his own soul in company with the knowledge of the crimes he has committed. No one outside of himself need be the accuser, for as his consciousness rises to a higher plane than where it lived when the crime was committed, he will become his own accuser. Forgiveness, if he gets it, will not erase the memory record of the facts; neither is it possible for him to get away from himself, or his own consciousness, while memory and awareness are his lot in life. If man is truly educated or wise, he will not be a shrewd criminal. He will not commit crime, for it will remain on record, and crime cannot be cheated out of existence.

The idea advanced that one can commit crime against another and be forgiven for the offense through providence, or the third person, is deceiving in the extreme. It is impossible to settle a debt without the payment is made to the one to whom it is due. To commit crime and atone for it to the one offended, is full satisfaction, but does not wipe it from the akasic records; the fact of the crime remains. It is soothing to be pardoned by the offended and commendable to seek such pardon. Still for all this, individual life is made up by debits and credits, and crime and immorality can only be

atoned when the debts are paid to the uttermost farthing, and the credited side of the ledger of life show a balance that we, each for ourselves, can look on with pride and be not ashamed.

There are crime under the moral Law that cannot be atoned in the slightest degree. And this is true in every case where one should commit offense against another he cannot restore. For we cannot recall past events or erase the records.

It is a common practice for the criminally inclined to justify their acts, by first provoking the ones they would offend, and then after having provoked them to resentment, commit desperate acts under a pretense of self-defense. When their better judgment prevails, they will discover that the measure of good and evil is fixed in the motive and not their subterfuge.

The questions of right and wrong, good and evil, are mooted ones indeed. Courts have, throughout the civilized ages, tried to determine just where the line shall be drawn. There never can be a fixed line, neither can we reach an ideal so long as decisions are rendered on precedents, for the reason that the past events cannot offer the moral standard to guide the present, nor can the present claim precedent over the future.

According to our standard of morality today, it is impossible for one to commit a crime and go free of its consequences by asking forgiveness, and in some unexplained way transfer his guilt onto the shoulders of a third party. He should know that each of us are personally responsible for what we do within the scope of our knowledge and are held accountable for our evil thoughts and deeds to the extent of our moral development. The record is kept within our own souls, and

we cannot escape what we ourselves personally generate, develop, characterize and materialize, for it is a part of our own very being.

It is not a hard proposition to determine what is good or what is evil. It is habits that promote evil, as well as good, and the one is as easy to live as the other. Living itself is but a habit of repeating. It takes practice to live a moral life. It also takes practice to live an evil life. It is just as hard for a moral person to commit a crime as it is for an immoral person to commit a good deed. When you know this truth, the living of it will be your reward.

In all the annals of life, knowingly or unknowingly, man reaps what he sows. He not only reaps what he sows, but in his sowing others reap what he sows, as he in turn must reap what others sow. And thus, the whole human race must rise or fall together.

In dealing with the Moral Law, we have no reference to the sexual question, for this question, like all other acts of Life, has only its own part to play in the general index of character building. The question referred to in this chapter of Art and the Moral Law covers the entire scope of Human Life.

Our experiences and struggles of life are the base line of intelligence and happiness. He who has tasted no sorrow has not the capacity to measure joy.

The trials, tribulations and seeming troubles of life, are the measure of the pleasures in the liberty that follows. We cannot have or even know one without the other, any more than we can know and enjoy the light without having seen or experienced the darkness.

In conclusion, let us repeat, that Art and the Moral Law is an outgrowth of the Mental World. Its very

existence depends upon arbitrary mind, individually and collectively. It is not only the expression, but the condition and home of the immortal Soul.

As man rises, the moral concept rises step by step, and with each step upward a greater mental horizon is brought into view.

With hope, aspiration and desire, man's upward trend will ever be toward the goal of happiness and bliss in the light of eternal truth.

CHAPTER XVI.

POLITICAL ECONOMY.

Our present status of education is not along the line of pure intellectual advancement, or how to provide the largest success for the individual or the human progress. What is generally practiced in educational work, to say the least, is not up to the highest standard of wisdom. The highest aim of the educator is not for the general good of all, but to the individual. The policy is that the individual shall be an educated success, with the aim and object of that being a commercial success.

Individual success carried to extremes is often at the expense of the masses, while on the other hand, if we curtail the individual, we destroy frugality and ambition. Laws are passed to encourage the individual, but are too often special privilege laws. The result is that injustice is done the masses.

The people of a nation are divided into two general classes: the useful and the useless. Among the useful of the first importance are producers of food, raiment and shelter. Second: the professional and educational. Third: the producers of enjoyment, experience and protection. Among the useless are those who produce nothing; who live on what they have inherited; those who scheme by gambling and otherwise extract their livelihood out of the savings of others, and those who think that the world owes them a living, and that it is their right to eat their daily bread by the sweat of other brows.

The greater part of the world's immorality is cul-

tured in the minds of the useless classes, for usually the useful classes have their minds engaged in their daily vocations, while the idle scheme to rob the useful while they are asleep. The world will take a great step forward when it provides the basic remedy that the habitual criminal shall not be permitted longer to propagate.

Under the subject of "Political Economy," there is no question of greater importance than that of money. In spite of the fact of its importance and under our present civilization, its general usefulness, we have met but few persons that know what money really is. The general public may think that money is a medium of exchange—a commodity of value. It is not a medium of exchange, in a true sense of the word, nor is it a commodity of value, for it has no value in itself. Others say it is a commodity with purchasing power. Even this qualification is lacking when we try to purchase what the other fellow won't sell. So what is it? It is the blood of commerce. It has but one function, and no intrinsic value. For value is not in the money, but in the demand for its use. Its only function is that of debt paying, and the power is not in the money, but the credit of the nation and law behind it. In fact, it is a legal tender and debt payer and nothing more.

You contract a debt by making a purchase, and when the agreement is consummated either at the time, or later, as might be agreed upon, you settle the debt by presenting that which the law calls legal tender and the debt is satisfied, not by the power of the money, but by its being a genuine evidence of the law behind it.

Money, when properly used within the function it contains, is the blood of commerce, and is essential to its

mobility as blood is to the physical body, or the nerve fluid is to the nervous system.

In order that money shall fully perform its legal function its volume should be maintained in constant circulation and in quantity to meet every legitimate demand upon it daily. That which may be hoarded up or hid away while so hoarded, or placed in hiding for the time being, does not serve as the circulating blood of commerce.

Money placed in banking accounts to meet current payments may be said to be in circulation. Savings accounts that are loaned out are also thereby placed in circulation. But money that is arbitrarily locked up is like unto stagnant blood of the physical body. It means commercial congestion. Money lost by fire or ship sinking is a bleeding process to commerce and in order to retain normal conditions must be replaced.

Money has a unit base which fixes the price of things according to the supply and demand of the unit quantity of money in circulation. To decrease the volume of money below the amount that will settle accounts of daily transactions increases the demand for it, and in a like measure reduces the price on commodities. For where money is demanded to settle debts, it first must be purchased in exchange for products, and where the demand upon money is high the prices of products are low, for the reason that they rest each upon opposite ends of the commercial lever.

Whenever it is possible for individuals, single or jointly, to artificially cut down the circulating medium of commerce, the act automatically cuts down the relative price of all commodities. Thus individuals can purchase commodities on a depleted market, and when

money is forced into circulation, it stimulates commerce, and property prices raise; but the latter state of affairs is carefully guarded against and is manifest only under times of stress, of emergency, or when product gamblers wish to sell out.

In our nation we possess about one hundred billions of wealth, based upon the money measure as kept at about fifty dollars per capita. Per capita, however, is not the true base to serve as a normal guide. The most reasonable governing point should be a circulating medium maintained equivalent to settle each day's average purchase throughout the country. For, while some dollars will settle several debts each day, other dollars will sleep in some pockets for several days without settling any debts.

Some people think that money should have an intrinsic value and they try to give this quality to it, but that cannot be done. The function of money lies in the credit of the nation and the law back of it. To coin money upon silver or gold does not effect its function (although it might add to the credit of a weak nation that issues it), for the reason that in using the money you cannot use the coin. And if you use the coin you destroy the money.

Bullion always has a commercial value, but when stamped as coin, loses its value as bullion. It also loses its commercial value by wear, and when transferred in quantity loses its monetary value also, for it is always sold by weight.

Where a government issues a full legal tender without the attempt of procuring intrinsic value, the money quality does not shrink by wear, tear, fire or other

losses, wherein the numbers are registered and guaranteed.

The ordinary politician knows little or nothing about the function of money. It is a matter that statesmen alone are able to cope with, and because of our lack of statesmen heretofore, the monetary system had to rest upon confidence. When confidence got a jar, the system failed, commerce then became weak and ill for the lack of a healthy circulation.

It is not he who has large quantities of money that does injury to man, but he who fails to use it to promote the development of food, raiment and shelter. It is not he who wears the diamonds and pearls, lives in a stately mansion, sits in his office behind the teller's counter, or rides in palace cars that becomes the enemy to man, but he who uses his wealth to the injury of others.

It is not the amassing of great wealth by the individual that injures man, for nature limits the time of the hoarder and he passes on, leaving the wealth behind. The massing is injurious only to the extent of its entailment, and the extent it increases the number of the useless classes.

It is not the accumulation of great national debts that we should fear, because as a whole the human family is a unit and we can owe no national debt to other sources than man. It is the losses we sustain in the destructive process that strike the vital interest, for what is destroyed must be reproduced by the useful classes. The injury done mankind by debts is in the bonding of the producer to pay tribute to an increased useless class in interest paid on such debts. For just in proportion to what individuals are able

to collect from the nation, means that much less for themselves to produce, and in the same measure as one gains, he inclines to the useless class, and demands just that much more from the useful class.

Man as a rule does not labor because he wants to, but because he finds it expedient to do so. What he wants in this life is food, raiment, shelter, education, pleasure and experience. That much he is entitled to, and more than that he cannot make good use of if he had it.

Whatever the useless classes fail to produce toward their own needs in life, but use, must be made up by the useful classes, and to that extent increases the burdens of the producers.

The greatest menace that the useless classes exercise over the useful classes is the stand taken between the producer and the consumer. They do not purchase products for storage or preservation, nor do they enter the vocation as a legitimate purchasing and distributing business. Their efforts are always to grab the products that are inclined to be scarce as they are about to be passed from the hands of the producers to the consumers, and hold up the delivery until they collect a high tribute before permitting the transfer to be made. They do nothing toward the producing, but stand guard, barring a legitimate transfer, until they collect a ransom. Such collection adds nothing to the general production, but supports further expanding of the useless classes, and increases further the burdens of the producers.

It should be considered high treason to engage in gambling with the necessities of life, for as much as it may seem legitimate to the speculator, his methods

are nevertheless like withholding the spoon from the mouth of the child until the mother pays a ransom for each precious morsel fed. Our present moral status permits this gambling today, but it will be a crime to-morrow.

There is a supreme struggle on the part of a growing number to depart from the present competitive system in political economy, and adopt government ownership, instead. Where government ownership has been adopted, it has proven a success, particularly so in the postoffice and mail system, and in the public school system and a few minor branches in municipalities.

There is no question but that the greatest good will result to the greatest number, when all things used in common shall be owned in common, leaving individual ownership and individually used properties under the competitive system. For without personal ownership, there would be no personal ambition, and without personal ambition, there would be no personal effort or personal gratification.

Give to the individual every right that will encourage and develop, for the development of one individual is an object lesson to others. See to it, however, that the individual does not override his rights at the expense of his fellow-men.

CHAPTER XVII.

UNIVERSAL CONSCIOUSNESS.

The Universe, although composed of myriads of Solar Systems, divided by many Planes and sub-Planes, is nevertheless tied together as the one grand whole by bonds of contact.

The lines of contact are invisible, but potent, and it is due to these lines that everything has a degree of feeling, is conscious of, and influenced by, every other thing, making it impossible for any one thing to exist absolutely alone in the Universe.

Consciousness is due wholly to the fact that things are influenced by all other things, and the influences are a result of actual lines of contact.

In the primary expressions it is purely mechanical, but we shall be able to show that it, like other potentialities, is subject to development, and that it finally reaches a state of arbitrary capacity.

The consciousness that pervades all creation is a factor of perfect accuracy. Some call it Supreme Intelligence, or Over-Soul. A better name, probably, is Universal Consciousness.

Only a few minds seem to have realized that there is such a thing as a Universal Consciousness, for the reason that they have sought for Nature's intelligence in a personality, and pass it by without seeing that it is in everything. They have looked for the Infinite, expecting to find it like the finite. They have sought the Absolute with a relative mind from a relative standpoint, with the idea that it, too, was relative.

The supreme Intellect does not need to reason, scheme or plan; for it is the base of the Absolute, conforming to eternal progress by immutable process. It is the Intellect that provides that a circumference shall be larger than a center; that 2 and 2 shall be 4 and not 5. It does not have even to think, that it might change, for it is changeless. It is the spirit of immutable Laws.

Intellectual contact is truth itself. It is not separate and apart from things, but pervades all things even to itself.

It is not a blind force, for its Universal contact is itself Universal sight. It is not deaf, for it is the embodiment of Universal rhythmic tone. Its will is the mandate of Immutable Law.

The finite mind differs from that of the Universal as a center differs from endless space; as the infinitesimal from the Infinitude.

Individual consciousness—individual mind—is a miniature reflection; a relative effect, embodied with personality. Universal consciousness is impersonal and boundless.

If there was not a Universal, there could not be a personal consciousness any more than a sight line could rest upon that which does not exist.

Universal consciousness embraces basic causation. Personal consciousness is the result of personal contact with things that do exist. Thoughts generate within personal consciousness by virtue of contact with things. A combination of thoughts are the mental units of organic mind. Organic mind is result, not cause. We might have a thinker, but with nothing to think about he could not create a thought, and without thoughts there could be no finite mind. The Universal does not

think, does not have to think. It becomes the embodiment of the whole. Whatever there has been, whatever exists is Universal.

Personal consciousness takes form around a finite center. It grows and becomes a part of the whole. It is a microcosm of the macrocosm. The one thinks; the other has.

Personal consciousness develops in personal awareness reflecting the Universal. Its distinction is to compile the whole in miniature essence. The very fact that mind does conceive and perceive is positive proof of its function and capacity.

Aspiration, desire and harmonious relation, constantly and persistently maintained, will accomplish results for every normal mind. The greatest hindrance is erroneous and fixed ideas; supported by injustice and personal selfishness.

To be in tune with eternal truth and fact, you must possess equity and harmony in self. In order to transmit wireless intelligence, the receiver must be in tune with the transmitter.

It has been said that "you must become as a little child before you can comprehend." It is not that one shall become meek or mentally weak, but that one shall rid the mind of prejudice and false ideas that have no foundation in fact.

When one is enabled to clean up one's mental household, the very soul becomes receptive to the eternal truth. When one knows one's self in that attitude, one becomes a mental magnet, a receiver and receptacle of Universal consciousness, and the compensation is attained, not because a favor has been granted, but because one has

cleared the debris from the lines of contact, between soul consciousness and that of the Universal.

In using the lines, one has not laid them. They were already there. One may not know it, perhaps, having never used them before. The Law is universal; no man has a monopoly over lines leading to eternal truth.

Who are the Master Minds, if not those who are in touch with the Universal? Our first duty to ourselves is to know the truth, and the truth will set us mentally free.

Mental freedom means, not freedom from ignorance, for ignorance is mental vacuum. It means freedom from falsehood, error and corrupt thinking. Every individual starts to think from the point of personal ignorance and oftentimes inherited falsehood, but when a mind is loaded down with that which is not true it has a mental deadweight, which it is bound to rid itself of before it can digest healthy mental food, from which to construct a mind in harmony with the light of eternal truth.

It is almost frightful to contemplate that when we have time to reflect and examine ourselves, we find that most all we know is either false, visionary or immoral. That it does not conform to Nature and must give way to facts. For facts and facts only survive in the intellectual realm. The maxim that one fact is worth a thousand theories, holds good.

What we believe is our preliminary self. What we know is our real self. What we do not as yet know, is our prospective self.

If you would know the truth, seek it in Nature through your own Soul's Consciousness in the realm of the Universal. It will never deceive you. Man is the

only teacher of falsehood, the only deceiver. Mankind is Man's only enemy.

Our trials and tribulations are the result of injustice to one another. Miseries and fears are cultivated into apparent realities through the scheming and cunning of Man to Man.

Our minds have been constantly loaded with the fabulous and fictitious frailties. We inherit the demoralizing thoughts of our ancestors. To that extent we are mentally weak and moral cowards. Our superstitions have made us afraid to open our eyes and reason to Nature for her boundless store of knowledge and enlightenment. Not being able to comprehend the real, we seek comfort in the myths and fables.

Falsehood lives, as well as truth, but it does so by the artificial energy behind it. It probably has a mission to fill, so that we shall know the distinction of truth. Truth is the builder of concrete mind. Knowledge is mind in harmony with Nature. Error must fade away before the light of eternal truth, as darkness vanishes with the coming day.

The animal world surpasses Man in some things. The bloodhound can see the culprit with the eye of his soul. He knows the direction to travel and knows the personality when he finds him. His evidence is better than that of Man, in the courts, for psychic powers. The carrier pigeon can line up the direction of his home and fly straight to it without chart or compass. Most of the animals can find their mates, though lost in the wilderness. Man has lost those faculties. His mind has been calloused by the scars of erroneous teaching. He has left off Nature and lives in a world of art.

We think today in words, pictures and symbols. As

carriers and constructors, if they are laden with truth, then the mind is builded concretely. If laden with fiction and fable it could be no better than the material used in its construction.

A perfect individual consciousness depends upon a perfect individual mind. A perfect individual mind is a prototype of the universal consciousness embodied with Will and Reason.

The Universal is opened to every normal mind. "Knock and it shall be opened unto you. Seek and ye shall find." In other words, what you wish to know and what you are entitled to know, ask your innermost self the question. It will be answered unto you. Should you fail, ask again and again. When the line is opened the answer is yours.

Remember that consultation with the Universal is an innermost prayer. Not that the Universal shall do something for us, or change its *modus operandi* to suit our ideas, for it is already right in all things. What we each need is to be placed aright ourselves, and since we are miniature, it is easier to move into line with the Universe than to have the Universe move into line with us. The result would be the same. Prayers are always answered, when we ourselves are aligned with Universal truth and consciousness.



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