There is one eternal Law in nature, one that always tends to adjust contraries and to produce final harmony. It is owing to this law of spiritual development superseding the physical and purely intellectual, that mankind will become freed from its false gods, and find itself finally—\textit{SELF-REDEEMED}.

\textsc{H. P. Blavatsky}

\textbf{THE INTELLIGENCE BEHIND EVOLUTION:}
\textit{by Magister Artium}

\textsc{Mr. Alfred Russel Wallace}, who is ninety years old, was some months ago the subject of an appreciation in \textit{Nature} by Henry Fairfield Osborn, Professor of Zoology in Columbia University. Professor Osborn writes:

\begin{quotation}
We have ourselves experienced a loss of confidence with advancing years, an increasing humility in the face of transformations which become more and more mysterious the more we study them, although we may not join with this master in his appeal to an organizing and directing principle. Younger men than Wallace, both among the zoologists and philosophers of our own time, have given a somewhat similar metaphysical solution of the eternal problem of adaptation, which still baffles and transcends our powers of experiment and reasoning.
\end{quotation}

The allusion is to Dr. Wallace's expression of his ripened views in his recent book, wherein he so strongly maintains that the more we study Nature the more do we need to postulate intelligence and directive power everywhere. Dr. Wallace has also criticised the views of Professor Schäfer, who had delivered a Presidential Address to the British Association, on the nature and origin of life; pointing out that the additional details discovered by biologists merely intensify the problem of life instead of solving it; and that a mere description of the processes we see at work leaves us as far as ever from an understanding of their causes.
The more closely we study Nature, the more must we discern intelligence in her workings. Those who have most closely studied the functions and structures of plants are the most convinced of the need for postulating intelligence. The rootlets of plants are able to select what food they require, and to reject what they do not need, by means that defy alike chemical and mechanical explanation. Plants growing in arid climates adopt the most ingenious schemes for extracting every particle of moisture from the air while at the same time preventing all evaporation from their own leaves. If they are not intelligent, they are a very good imitation. If we do not postulate intelligence, we must postulate its equivalent; and if there is no purpose behind the actions of these plants, there is something as good as purpose. We cannot get along without a metaphysical explanation; for, to find the origins and causes of anything, we must seek beyond that thing, and that which actuates matter cannot itself be matter (in the same sense of the word).

If evolution be true, that is all the more reason for studying its causes as well as its effects. It has been well said that all the scientific discoveries about Nature have left us more than ever in need of inherent intelligence in order to account for them. But this does not mean that we must go back to a crude doctrinal conception of Deity. Nor need we invent new systems of demonology or take refuge in an abstract pantheism. Instead of ignoring the facts and then devising new explanations in place of those we shirk, let us look the facts in the face.

Why not regard a cell as a small being, engaged, like other beings, in fulfilling the purposes of its life? (And talking of small beings, do we not find that their structure is still infinitely complex; and that the more we magnify, the more details we find?) Sooner or later science will have to come to the conclusion that even so-called inorganic matter is made up of tiny lives or animate beings, whose activities are directed by purpose. Instead of taking for the basis of their philosophy an abstract conception — rudimentary matter — of which no one has any experience, they will decide to take mind as that basis; and everybody has experience of mind. Instead of regarding the universe as an outcome of matter, we shall look upon it as a manifestation of mind.

In evolution we see a dual process: a spirit or life, unfolding itself in forms. Professor Schäfer seems anxious to identify life with
matter, thus uniting cause and effect into one. He will not hear of anything immaterial; he calls it supernatural. But we cannot get along without something immaterial (or, at least, not physically material); and this brings us to a consideration of the meaning of the word "spirit."

Spirit may be roughly defined as that which not being itself material, is the energetic or informing principle in or behind matter. This definition reduces both spirit and matter to abstractions and constitutes a crude and undetailed dualism.

But why need we jump at one bound from physical matter to spirit? Doubtless that which immediately actuates physical matter is a subtler and more energetic kind of matter. Steam actuates an engine, but steam is still matter, though of a higher grade than that of the engine. Again, the steam itself is rendered potent by heat, of which it is the carrier; and this heat may be a still finer grade of matter. Professor Schäfer and those who think with him would be able to get along better if they had two or more grades of matter at their disposal instead of only one. This idea, then, is equivalent to defining spirit (within certain limits of meaning) as a finer kind of matter. Evidently we can go on supposing finer and finer grades of matter indefinitely, bringing our system to an ideal philosophical consummation by supposing an original unity and an original duality.

The duality of Spirit-Matter is discernible everywhere; it is an eternal fact. We cannot perceive, or even conceive, anything which is not both spirit and matter. Science may talk of energy and mass, but these are simply alternative terms for spirit and matter—the one active, the other passive; the one energetic, the other formative. When it comes to actual scrutiny of Nature we cannot discover anything which is pure energy or anything which is pure inertia. The two are always inseparably united; they cannot even be thought of apart. The question whether light, heat, electricity, etc., are forms of matter or modes of energy, has no logical meaning. All we can say is that electricity, though not ordinary physical matter, is still some kind of matter; that light, though not a physical corpus, is yet a corpus; that heat is not pure spirit, nor ponderable matter either, and must therefore be a grade of matter so much subtler than physical matter as to stand in the relation of a spirit towards the latter.

The above might be mathematically illustrated by taking the odd numbers to represent spirit and the even numbers matter. Call the
number One the original Spirit, and the number Two the primordial Matter. One and Two make Three, their Son, and Three is the highest form of Spirit after the Absolute. The matter corresponding to this Spirit is represented by the number Four. Three and Four make Seven, and Seven stands for another grade of Spirit. The number Eight is the Matter that pairs off with this Spirit. And so on. It will be observed that the odd numbers, Three, Seven, etc., are each made up of an odd number joined to an even number; thus illustrating the fact that both spirit and matter are subdivisible into spirit and matter.

This illustration shows that neither matter nor spirit are independent realities, and that it is their union that constitutes a real existence. For this we need another name, and the word "life" will serve the purpose. The union of spirit and matter constitutes life; or life can be defined as spirit-matter. Now what does science find when it explores matter with its instruments? Not pure matter, not pure spirit, but everywhere life, whether it be quivering cells or vibrating atoms or darting specks of fire. It would seem that we can get no further in our physical analysis. Life is the basis of Nature, the one omnipresent reality. If we try to analyse it further we fail; an ideal analysis reduces it to abstractions.

And back of life stands mind or consciousness. Mind is, as it were, embodied in life; and life is embodied in a physical form. This reminds one of the use made of the three words, Spirit, Soul, Matter, in The Secret Doctrine. Soul is said to be the vehicle of spirit, and matter the vehicle of soul.

The word evolution needs to be accompanied by a correlative word — involution: spirit descending into matter, and matter ascending towards spirit. In order that a material organism may grow, something must enter into it. In evolution we see not only the ascent of matter but the descent of spirit. Just as the parent organisms yield the whole or a part of their life to the offspring, as leaven enters into dough, as electricity enters into the inert filament of a lamp, so the living power enters into the cell or organism and causes it to expand and increase.

What of the evolution of life, the evolution of soul, the evolution of mind, the evolution of that which is beyond even mind? All these phases of the question have to be considered; the question is much more complex and intricate than many people seem to think that it is.
When H. P. Blavatsky said that biology was one of the magicians of the future, she must have foreseen for that science possibilities to which it has not yet attained. Yet we can trace its future path by present signs. Biology is revealing the fact that intelligent life is everywhere. So long as observers are true to their program of accurate observation and impartial judgment, their researches can only lead to the correcting of past errors and the revelation of the truth. Fantastic theories will disappear with new generations of biologists, free from the old molds of mind.

One of the old prejudices to be overcome is the desire to emphasize the animal nature of man—a desire which seems to be a perfect obsession. Picture papers seem to gloat over the idea that man has been an ape and therefore contains ape-like characteristics. Who doubts that man has ape-like characteristics in him, as well as the characteristics of the pig, the hyena, the donkey, and other creatures? But why need we emphasize and gloat over this part of our nature? Is it perchance to excuse ourselves? Well, we cannot at the same time enjoy the guiltlessness of the animal and the sense of the man. Some people are fond of explaining that man is nothing but a brute or a primordial savage with a coating on top; and yet at the same time they assume airs of wisdom as though they thought themselves gods.

Who will tell us about the origin of man's intelligence, conscience, aspirations, enthusiasms? Is there not a scientific way of studying these questions? Dr. Wallace said recently:

I think we have got to recognize that between man and the ultimate God there is an almost infinite multitude of beings working in the universe at large, at tasks as definite and important as any that we have to perform on earth. I imagine that the universe is peopled with spirits—that is, with intelligent beings—with powers and duties akin to our own, but vaster. I think there is a gradual ascent from man upward.

And he might have added—should have added—"from man downward." He recognizes that deeds are done by doers, actions by actors. Motion is the expression of intent, and intent is the attribute of a being. The only alternative to this reasoning is to put abstractions in place of realities and to talk about forces and tendencies and laws.

Yet there is some risk about advocating the above view, on account of the fallacies and superstitions to which it might give rise in some minds. Some imagine that to people the universe with spirits would be like adding something to that which is already full; in short, they
would regard the spirits as something extra. This class of people, though claiming to believe in spirits, are really materialists; they are believers in the "supernatural" and "miraculous." They imagine little spirits getting in among the hard round particles of matter and pushing them to and fro. They believe in "phenomena"—occasional events brought about in a supernatural manner. But the real meaning of the doctrine is that the intelligences in the universe act in a natural manner, that the forces of nature are their actions, and that there could not be any nature or any natural phenomena at all without them. A "phenomenon" is merely a less usual and more striking manifestation of some natural law; if I make a book come across the room to me without visible means (thus performing an "occult phenomenon"), I have merely used one of my own natural powers and availed myself of certain natural powers of nature. The only difference between me and other people is that I know how to do it and they don't.

If nature is indeed informed by intelligent beings, then it must be possible for man to enter into a closer communion with nature and to obtain from her more intimate responses to his appeals for knowledge. And this might account for many things related of ancient times, which do not seem to apply to the present day. For our attitude towards nature has not been so sympathetic as it might have been; too often we have been ruthless despoilers or dissectors. The fairies, nymphs, and genie locorum, have probably emigrated to more congenial surroundings!

One almost fears to speak of such things at all in this superstitious age, for fear some new and foolish cult may be started. But knowledge is for the serious, and the hidden mysteries are revealed to the pure. This is no arbitrary law of a personal God, but a mere manifestation of cause and effect; for only the pure have eyes clear enough to see with. True Science really reduces itself to the knowledge of how to live harmoniously, in consonance with natural laws.
SYMBOLOGY: by R. Machell

The symbol of a serpent biting its own tail is so familiar that one hardly thinks it necessary to look at it attentively; yet, like most familiar things, its meaning is almost inexhaustible, and occasionally, as our intelligence develops, we recognize a new meaning, a new application of the symbol to our own experiences.

How like humanity is that foolish serpent which looks on its own tail as something it can swallow. How not a few men, in like manner, look on their brothers as food for their commercial or social appetites. How one seeks to devour another and chokes in the effort. For, like the serpent, one can only swallow about so much, and then there is a deadlock in the operation, and the unity of the body of which the head and the tail are parts becomes rather painfully apparent. What a perfect symbol of illusion!

We moderns rather despise symbology because we have learned to read and write, and we do both so freely that we find it easier to put what we have to say into a form of word than into a symbolical design. We think we have got a better mode of expression, because words seem so much more explicit than pictures. Yet if we read and think carefully we see very plainly that words are themselves substitutes for symbols and perhaps even more elusive forms of expression than the pictorial symbols that were formerly so much more used. For words convey as many meanings as there are minds that can read them; and every educated person thinks he knows the meaning of the words in common use, though in reality he hardly ever has a clear idea of the exact meaning he himself attaches to the words he uses and is completely in the dark as to the varying interpretations that other people put upon the same words. Whereas a pictorial symbol is an appeal to the imagination direct, and the measure of its meaning is the measure of the imagination of the one who looks upon it.

When language was written by means of pictorial symbols, instead of letters that have lost their symbolic character, then every penman was more or less of an artist, and his imagination was trained to interpret as surely as his hand was disciplined to design pictorial symbols. It is said that the Japanese owe much of their national skill as artist craftsmen to the use of pictorial writing which necessitates a considerable amount of artistic skill; and to the use of chop-sticks with which to handle food, for no European can approach the manual dexterity of these people unless specially trained. The elementary education of the
Japanese is in itself a preparatory training in artistic manipulation and manual dexterity.

But the "get rich quick" idea has been applied to learning and produces the inevitable results; everybody has a certain familiarity with the arts of reading and writing, but in getting these we have sacrificed much skill of hand and eye and much of our imagination. The gain seemed so sure and tempting, so like the serpent's tail, just about the right size for a mouthful when looked at end-wise. Now we have got more than we counted on, and are in danger of being choked with words of our own production.

In grasping words we have let go imagination. Words that aim at precise definition of thoughts are just walls to shut out ideas; they are limitations, definitions, barriers in fact; while symbols are appeals to the imagination, which is the faculty of opening the mind to ideas; symbology is interpretation and expression by means of suggestion.

Symbology frankly appeals to the imagination, and is justified in doing so by the assurance that in each mind there is a door that may be opened inwards towards the Truth which is universal. It may be that there are many such doorways and many veils that must be lifted, but the Truth is behind. Whereas the use of words seems based on mistrust of man's inner connexion with the source of Truth and Light. It is assumed that man can only learn by being told or taught things, that he cannot reach the Truth by internal illumination, but only by external teaching. In this way the mind becomes filled with formulae, words, and thoughts injected into the mind, a kind of substitute for knowledge, which (alone) is no more fit nourishment for the true man than is the tail fit food for the serpent.

The serpent's tail is very useful in enabling the creature to get along, but it is not good eating because there is no end to it. Learning of the brain-mind, and knowledge of formulae are exceedingly useful in the same way, but they are really mind-products and not mind-food. The food of the mind is from within and is spiritual light; this can only be got by opening the inner doorways of the mind by the faculty of imagination. When these doorways are opened intuition gives the mind direct perception of essential truth on any subject. The application of these perceptions of truth to the facts of life and the expression of the results in terms of words is the work of the brain; and such work is as necessary to the completion of the man as is a tail to a serpent. These truths seem clear, but how often overlooked!
JAPANESE GARDENS: by E. S. Stephenson
Professor of Mathematics in the Imperial Naval College, Yokosuka, Japan

ARDENS in Japan, whether of vast area or tiny things within the limits of a china tray, are all landscape gardens; for they are designed to represent the scenery of the country in ideal forms. In order to accomplish this the designer must be well acquainted with the beautiful scenes of his native land, though he shall not servilely copy any one of them. It is the same with the Japanese artist: he must observe birds or fish or trees in such numbers that he is able to give you a picture not of any individual one but rather of the ideal type — the essential features of the whole species. Of course it is also necessary to study minutely the famous gardens that exist already; and in these he finds models of such excellence that his natural artistic sense soon reaches a high level. For the ordinary journeyman gardener as he works his way through the country sees the results of an art that has occupied the attention of sages, poets, and garden-lovers for generations, and seems instinctively to grasp the motive and esthetic principles involved; thus the Japanese garden at its best may be fitly termed "a modulation from pure nature to pure art." There is nothing haphazard about the construction of it. The gardener after carefully considering the location with its bearing on the house, and the materials available, knows beforehand just how the garden will appear, for he sees it in his mind's eye, and knows just the place for every stone and every tree. The stones are placed first, as they form the skeleton of the garden. They may be large blocks of limestone of irregular shape, or peaks and outcroppings of rocks made by joining together smaller stones with beautiful effect. The writer has often watched the placing of these stones — some of them of immense size — and seen the pains taken by the gardener and his associates in their faultless arrangement. They will observe it from every point of view — suggestions made by even the humblest of the party being duly considered — until the consensus of opinion pronounces it right. Simple though the operation of placing a stone may appear, an ideal is sought and when they finally bring it into being the collective consciousness responds to the truth of it. With all the other features of the garden it is the same; for the gardener is an artist and a master of his honorable craft. He works unhurriedly; he will pause now and then and take a few whiffs at his diminutive pipe as he contemplates a piece of finished work. But he has got something in the interval; and as he resumes his work there
is none of the listless reluctance that comes of merely mechanical toil. They say in Japan that gardeners live long, and no doubt there is a good reason for it. I spoke recently to one of the old school nearly eighty years of age, but alert and full of buoyant cheerfulness and good will to plants as well as to men. He was cultivating roses along with the common nursery plants of Japan and from the feeling way in which he spoke of them I did not wonder at the richness and profusion of their blossoms.

Water scenery forms an essential part of the Japanese garden, and here again the same innate sense of fitness is shown. Even where water is not available ingenuity is not lacking. A dried lake or water-course is made to indicate it and every boulder and outcrop of rock is eloquent in its suggestion. Then paths are made with here and there a miniature bridge; and finally the trees and shrubs are put where they just seem naturally to belong. It is not intended to be a flower garden in the Western sense, for Japanese gardeners have other ideas. They know that however well such gardens may appear in summer with profusion of flowers the defects of the plan become apparent in winter when everything is apt to look desolate and bare. In contrast with this the Japanese garden — with its evergreen shrubs, pine trees of quaint and pleasing shapes, and the beautiful permanence of hills and rocks — is an unfailing delight throughout the year. Nor are suitable flowers and blossoming trees neglected: even in winter the camellia and the plum begin to bloom in the gardens, to be followed later by the cherry, the azalea, the peony, the iris, the wisteria, and so on throughout the year, till the chrysanthemum and the rest of aki no nanagusa (the seven flowers of autumn) appear, and the reddening maples brighten every scene. So all through the year something blooms and the faultless setting which the rest of the garden provides concentrates and shows to advantage every flower that appears. It is like the single ornament on a Japanese tokonoma: it invites one's attention and appreciation. Overcrowding in gardens as in houses is condemned by Japanese taste; and the tendency to display of wealth in ornament and luxury is carefully avoided.

The stone lanterns which form so characteristic and pleasing a feature of gardens here appear to be of purely Japanese origin. They are made in many varieties and their position in the garden is fixed by convention. The one seen in the foreground of the accompanying photograph of a nobleman’s garden in Tokyo is of the “snow scene”
type called *yukimi-dōrō* in Japanese. It has a broad top for the snow to rest on; and with the branch of a pine-tree overshadowing it, and both mantled with snow, the effect is very beautiful. These stone lanterns are not intended primarily for illumination. When a light is used it diffuses merely a soft glow, but it adds a suggestive and pleasing touch especially when reflected in the water of a small lake.

The pine-tree is the most esteemed for garden use, it being evergreen and of a form that harmonizes well with the other objects in the garden. Indeed it is eminently characteristic of the scenery of the country as this hardy tree may be found everywhere, especially along the sea-coast; and the pictorial phrase *haku-sha-sei-sho* (literally “white sand [and] green pines”) is familiar to every Japanese. The branches of the pine adapt themselves with sturdy resistance to the most violent winds, and the quaint and irregular shapes caused by constant battles with the storms are much admired. Tens of thousands of poems have been written about this tree: pines under snow, the sound of the wind in the trees, odes to its gnarled and vigorous branches, its shadows in the moonlight, its graceful silhouette against the evening sky, and innumerable other aspects. It is regarded as an emblem of endurance, fortitude, and long life — auspicious in every way. A like symbolism enters into the Japanese conception of other trees as well as flowers and even rocks and stones. The influence of ancient Buddhism on all the arts and refinements of life has been great; and the gardens also, with their harmony and repose so conducive to meditation, show the same unique and gracious effects.

BRAIN, MIND, AND SELF: by H. T. Edge, M.A.

It is generally considered to be a doctrine of scientific materialism that thought is a product of the brain, or that mind is a result of the workings of the brain; but this fallacy (for it can hardly be called anything else) is passing away. Recently we have even come across a scientific argument against it. The author of this argument argues that the brain is a machine, and that thought is a form of energy; and that, as machines do not create energy but merely transform it, therefore the brain does not create thought but merely handles it. Hence thought must be capable of existing apart from the brain. When the brain of a child grows with the development of his mind, we cannot
infer that the development of the mind was due to the growth of the brain; the brain has simply become a better instrument, thus adapting itself to the requirements of the expanding mind. Yet many people have a difficulty in conceiving of thought or mind as having any existence apart from physical matter. Perhaps a way might be found out of this difficulty by imagining the existence of other kinds of matter than the ordinary physical matter. Physical science has found this idea useful in assisting the conception of force and energy. If thought is a form of energy, it must inhere in some form of matter; for energy, without mass or inertia, becomes reduced to an abstraction. We might describe this finer kind of matter as mind-substance, and say that thought is this mind-substance in motion. But we must guard against making our theories too narrow or hard-and-fast; for the probability is that there are innumerable grades of matter in the universe, as well as many different kinds of energy that play therein.

This idea will at any rate help us to avoid materialism on the one hand and abstract idealism on the other, either of which extremes reduces mind and thought to an abstraction. Mind and thought are real, if anything is real; if they are not, we may as well give up arguing altogether, since we cannot argue without using our thoughts and minds.

Mind is more real than is physical matter; and the writer above mentioned speaks of mind as though mind were the real man. For he points out that we habitually use such expressions as “My hand,” thereby implying that we regard the bodily members as belonging to something or somebody that is not material. But the writer has overlooked the fact that we can also speak of “My mind” or “My thoughts,” thus implying that there is a something even superior to the ordinary mind, something which can be said to possess that mind. The same argument which proves the brain to be an organ or instrument proves also that the lower mind is an organ or instrument. That mind is, in short, a faculty. The question arises, “Of what is it a faculty, or who possesses that mind?” The answer of course is that it is the Ego or I which possesses; and so we find ourselves face to face with the riddle of the Sphinx, demanding to know what is ourselves—who am I?

The writer, in our opinion, makes another mistake in saying that the knowledge of mind is beyond our power. If we assume that we have some other faculty, higher than the lower mind, yet capable of
knowing, the Higher Mind, then we may say that this faculty can know. Or we can say that the mind can know itself; for experience tells us that the mind has a marvelous power of self-contemplation and self-analysis. It may be true that the ultimate Self can never be known; but we are a long way from that summit of attainment as yet and we need not limit our explorations on that account.

Self-knowledge is the highest and grandest science, including all the other sciences; for what can interest and concern a man more than to understand the life which he finds himself compelled to live? The introduction of an acquaintedness with the ancient philosophies of the Orient has turned Occidental thought in the direction of this most ancient of sciences; yet we have to beware of the many barren and deleterious uses to which a study of Oriental philosophy may be turned. The ancient science can only be profitably studied with the help of certain keys; or we might say that the Sphinx exacts certain conditions of him who would know her riddle. The principal key is Duty, a word which it is unnecessary to define, since its behests confront each one of us every hour and must either be regarded or disregarded. Conscience is another such word, and one might mention Honor, Fidelity, Loyalty, and many more, all implying the same urgent and unescapable conditions.

Evidently self-knowledge is not a pursuit upon which any one can enter lightly; and wherever we find people professing to follow it in any light or vain spirit, we may feel sure they will encounter many difficulties, though we may blame God, fate, or our ancestry for our delusions. It is our rebellious inclinations that make for us all our woes. We have to learn some time to control our inclinations, and the Soul has many lives before it in which to do so. Everyone must sooner or later enter upon the path of self-knowledge, for that is the object of life. Life seems a mystery to those who believe this life to be the only one; for its purposes are not discerned by so small a view. Could we view our life from the mountain-peak of our Soul — that is, our real Self — its purposes would be revealed. So self-knowledge may also be defined as the identifying of our mind with our Soul, so as to become conscious of the real purpose of our life. Theologically this might be described as knowing the will of God.

The lesser sciences can only proceed a certain distance without overstepping the line that divides them from the science of self-knowledge. Physicists have proceeded in their speculations to a point where
the ordinary channels of knowledge seem no longer reliable; and they must either fall back or go on. If they fall back, they must remain content with relative and limited knowledge; but if they go on, they will enter the domain of self-knowledge.

At the present time there is a great deal of talk about what is called self-knowledge and what is called occultism; but apart from Duty, Conscience, and the highest and most disinterested motives, all this is vain and leads to disappointment. The world is discovering (as often before) that Duty and Conscience are the bed-rock facts in life; and that, if we are to escape delusions and get back to realities, it is to them that we must get back. And none of our religions has left us in any doubt as to the truth that knowledge is the reward of Duty. Obligations confront us at every hour, and ours is the power to embrace the opportunity they afford. In meeting them faithfully we may perchance attain a little self-knowledge; for by fulfilling a duty we exercise our higher faculties.

NEW DISEASES AND OLD DESIRES: by Lydia Ross, M.D.

STEP by step science moves unwittingly towards a recognition of the practical common-sense of Theosophy. With only a working knowledge of this philosophy, often the tyro in medicine and other matters can read the solution to problems between the lines of the puzzled experts. Moreover, in a day of specialism, Theosophy is unique, not only in ability to solve diverse problems, but to unify them. Its fundamental explanation of life co-ordinates and relates matters which prevailing theories make contradictory and separate.

Much scientific confusion and incompleteness results from methods of exaggerated analysis which fail to encompass the subject by balancing investigations with synthesis. For instance, the biologist minutely describes the marvels of functional consciousness displayed by the cells of various organs. The unerring instinct of lung, liver, stomach, muscle, and other cells to take from the blood the needed material for their special function and growth is well known. But the analytic method, whose subtlety does not extend beyond the fine point of a scalpel, can go but half-way round so complex a subject as man and his conditions. A complete view of the case must synthesize the actions and qualities revealed by minute analysis. Nothing less than
the sum and general trend of functions and feeling can give the correct proportion and perspective to the picture of human life.

If the composite cell action of liver or of nervous tissues is more pronounced than that of lymph or blood-making cells, the whole body operates as a bilious or nervous temperament rather than lymphatic or sanguine. The whole conscious quality of mind, impulse, and character, also corresponds to the dominant organic type. The prevalence of mixed temperaments obscures this old-fashioned fact. Moreover, temperament is disregarded by the analytical materialism which recognizes tangible form and function, but has no intuitive perception of the more subtly potent rôle and types of feeling.

Consciousness indicates life; without it matter disintegrates, preparing for new forms of life. Death would often result from indifferent eating but for the conscious appetite. Desire for food concerns nutrition no less than digestion. The sense of well-being aroused by healthy exercise inclines the whole muscular body to activity. Evidently it is the pleasure of moving through the air and the water that prompts much of the bird's flight and the fish's swimming. Without tactile and temperature senses, self-preservation would fail from extremes of heat and cold and injurious contact. It is safe to say that the pelvic system, per se, would not insure race preservation. The body of desire rather than racial duty vitalizes reproduction.

In short, all healthy function has a rhythmic sense of satisfaction if not conscious pleasure. Similarly to these stimuli of physical senses, the mind and moral nature prompt the whole body to act out their myriad feelings and impulses. As they supply the motive power of love for the devoted mother, and of hatred for the murderer, so they prompt the body to express the entire repertoire of feeling. In return, the physical senses engage the mind and motive to enhance material sensations.

Without consciousness, the cell, the organ, and the body, become paralysed, atrophy, or die. The combined cell and organic feelings and impulses make up a perfect duplicate conscious form for the physical body. This is only subconscious as compared with the intellect; but compared with mere flesh it is superconscious, as it is also more vital and enduring.

This body of feeling and desire grows by expression, acquiring strength and momentum from activity. Stronger than the physical body, desire often sacrifices the best interest, health, and even life, in
seeking gratification. As a whole, its strong momentum and vital quality carry it beyond the point where the organs fail and the material body dies. Thus, as an entity of personal desires, it survives, for a time, its instrument of expression; and the "the evil that men do in their lives, lives after them."

Detached from both body and conscience, this entity instinctively seeks to feel the life force and to feed upon the vitality of some vicarious agent. Available subjects are found among negative, or evil natures, many of whom typify the racial increase of subconscious sense now generally in evidence. A certain psychic susceptibility is frequently seen in cases with devitalized health, unstable nerves, and flabby moral tone. Degrees of these conditions are apparent in the make-up of many neurasthenics, dabblers in pseudo-occultism, degenerates, will-crippled hypnotic victims, gamblers, drinkers, drug habitués, and sensualists.

This unfortunate army has progressively increased for a generation. It is about that length of time since H. P. Blavatsky appeared with some long-forgotten truths. By the ancient wisdom she logically and exhaustively analysed the nature of man. With equal synthesis, she harmonized the action of his triple nature in a three-fold evolution of body, mind, and spirit, that gives an adequate explanation and a worthy purpose to life. Moreover, she foresaw, foretold, and prescribed for the very conditions which confront us today. That she wrote in advance of her day is evident from the synthetic quality of her work, which eventually will mark the progress of the present century, as analysis characterized the out-going one.

Madame Blavatsky clearly describes the body of sensation and desire and conclusively shows it to be the link between mind and matter. Lacking human intelligence, it yet uses the lower phases of the mind for its own ends. Without the inertia of mere matter its acts along the material levels of the nature. In seeking expression it displays the keen and impelling animal instinct to find and know certain things related to it better than can the brain-mind.

An entity made up of only the lower phases of the human animal is a dangerous and unworthy survivor of even a reputable person. Doubly so are the many surviving shells of active, sensuous careers, in the unseen world around us.

In the blood, if not in the brain of this generation is a heritage of teaching that man has a soul, so loosely attached, as to be easily lost.
NEW DISEASES AND OLD DESIRES

From long-time ignorance that he is a soul, in an animal body, he has firmly identified himself with his strongest impulses — which are rarely his best ones. Therefore, lacking the old inhibitory fear of wrong-doing, his present strenuous life readily accepts the urge of an auto- or foreign impulse: The usual theology and psychology furnish no protecting knowledge of the danger of mischievous entities of passion, appetite, and desire, seeking expression.

A person of good average character and position, but negative or faulty, perhaps susceptible by nature or through some weakness, may relax his self-control, as by drinking or drugs. He may be pursued by an obsessing idea or strange impulse. He may endure more or less inner conflict before yielding, just as he would resist a spoken invitation to do anything wrong or injurious. Most likely he will not mention this dual inner argument, because, while dealing with ordinary affairs, the foreign idea is disassociated from his customary habits.

Continuing to drink, the real man, with his highest faculties, may be practically crowded out. His body, then, performs unusual deeds, out of all relation to his ordinary character. It will actively engage in mischievous, criminal, sensuous, or exciting experiences. He will not be stupid with drink, or merely inert, or absent-minded, or calmly meditative. These expenditures or explosions of force will serve no good purpose, and will serve no purpose at all, consistent with his character. Whatever is running the body never outdoes the owner in judgment, justice, nobility, kindliness, or aspiration. The controlling quality is shown in typical deeds. After the satisfaction of some characteristic experience — exciting, sensuous, etc. — the foreign impulse will relax its hold upon the usurped instrument whose owner then can regain possession. The man will have little and perhaps no knowledge of what has occurred, and will be puzzled at accusations and evidence of things he condemns. His shame, disgust, remorse, and reparation, will be in keeping with his ordinary make-up.

The chances are, this statement that a man’s body can be operated by an outside entity, would not be credited in a medical society or a court of law. Such a claim probably would be utterly ignored, lightly treated as a fairy-tale, or classed with medieval ignorance and superstitious belief in witchcraft. Meantime, life and liberty rest upon evidence from lips pledged to truth on the book that cites cases of “casting out devils.” And as a “devil” belongs to the clerical speciality, of course the ethical physician cannot see it even with a microscope.
If science rejects the idea of literal obsession, as not conforming
to accepted diagnostic formulae, the average reader may have no
difficulty in making the stubborn facts square perfectly with Madame
Blavatsky's teachings. In a recent medical journal a prominent and
thoughtful alienist describes "A New Disease of the Brain." With
italics added, he writes, in part, as follows:

A cider-drinking farmer was found putting obstructions on the railroad track.
He denied all recollection of his acts or motive, and the facts confirmed it, in his
uniform, conservative character, without anger at the railroad company and a man
of wealth and some character. The defense was disregarded and he served a term
in prison.

Persons of this character do unusual acts foreign to their everyday habits and
customs . . . make strange wills and business contracts, then later deny all recol-
clection of them . . .

Another class of persons, who use spirits steadily and are regarded as men
of average ability, honest, fair-dealing, and above suspicion of anything unusual,
suddenly become involved in dishonest acts, forge papers, sign notes, and take
advantage of others. Later they deny all recollection and repudiate the acts . . .
and accept the statement that they were intoxicated at the time, yet to their friends
and associates they seem in no way different, or unusual.

An instance of this was that of a very conservative man who would every
now and then become a speculator in Wall Street, buy stocks on margins and do
most unusual things, then recover and be utterly unable to explain why and how
he did them. He drank heavily every night. In his business and ordinary work
he seemed in no way different.

The alcohol has suspended the higher brain centers of caution and judgment,
as well as consciousness. Then morbid impulses of avarice, sexual gratification
or ostentatious display come in and hold them for a time. Then comes the period
of intense remorse and wonderment at how and why they did such unusual things.

Among ordinary drinking men, memory is one of the first and most promi-
nently affected organs, but the disorder is usually temporary . . . In some in-
stances he will never recollect the events of the past. No one doubts this is the
result of profound stupor from drink: but unconsciousness of thought or act in a
person not stupid, acting sanely, yet using spirits at the time, is a new disease, not
recognized in legal circles.

The paralysis of consciousness and personality may be so obscure that the
person may go about his usual work, showing average skill and judgment, and not
be recognized as other than sane.

A great wealth of illustrative cases . . . shows that the palsy from alcohol is
likely to produce a suspension of the higher functions of the brain, without dis-
turbing the lower and common appearance of sanity.

Diseases are timely reflections of morbid living. The Plague be-
longed to medieval dirt and ignorance, as the new and increasing
diseases of brain and nervous system show intensive wrongs in a sanitary but too material age.

Three factors are worth considering in our present problem. First: the racial increase in psychic consciousness and susceptibility. Second: the increased impetus in every phase of the strenuous life, of which the motor power is personal desire rather than "desire regulated by moral fitness." Third: increase of the conditions that prematurely liberate entities with strong momentum of unexpended impulses, and ignorance of the existence of these vampires on the part of their unfortunate victims.

THE BOOK OF NATURE IN CHAUCER: by H.

HAUCER, like other geniuses of the highest rank, was an all-around character, with every side of his nature developed and all held in an even balance. The associations of his early life combined the gay scenes of a Norman-French court with a private garden of study to which he was wont to retire for solace at night. Yet the love of nature could call him even from his beloved books. As he says in The Legend of Good Women:

And as for me, thogh that I can but lyte, [know but little
On bokes for to rede I me delyte, [them give
And to hem yeve I feyth and ful credence, [none
And in myn herte have hem in reverence; [go
So hertely, that ther is game noon
That fro my bokes maketh me to goon,
But hit be seldom, on the holyday;
Save, certeynly, when that the month of May
Is comen, and that I here the foules singe,
And that the floures ginnen for to springe,
Farwel my book and my devocioun!

His favorite flower is the daisy; he rises early to see it unfold to the morning sun; he goes forth late to see it fold its petals for the night:

In my bed ther daweth me no day [am not
That I nam up, and walking in the mede
To seen this flour agein the sonne sprede,
When hit upryseth erly by the morwe;            [morning
That blisful sighte softneth al my sorwe.

And whan that hit is ere, I renne blyve,            [quickly
As sone as ever the sonne ginneth weste,
To seen this flour, how it wol go to reste,
For fere of night, so hateth she derknesse!

It was while contemplating this flower that he sank to slumber and had a vision of the Queen of Love and her attendant train of true women:

And from a-fer com walking in the mede
The god of love, and in his hande a quene;
And she was clad in real habit grene.            [royal
A fret of gold she hadde next her heer,
And upon that a whyte coroun she beer
With florouns smale, and I shal nat lie;
For al the world, ryght as a dayesye
Y-corouned is with whyte leves lyte
So were the florouns of her coroun whyte.

Behynd this god of love, upon the grene,
I saugh cominge of ladyes nyntene
In real habit, a ful esy paas;
And after hem com of women swich a traas,           [train
That, sin that god Adam had mad of erthe,
The thridde part of mankynd, or the ferthe,
Ne wende I nat by possibilitee,
Had ever in this wyde worlde y-be.

" Hele and honour            [health
To trouthe of womanhede, and to this flour
That berth our alder pris in figuringe! [beareth away the prize of
Her whyte coroun berth the witnessinge!" us all in its fashioning.

This is what the daisy, with its heart of gold surrounded by a corona of pure white rays, suggested to the poet. Was the quality thus expressed in the form of the flower possible in human life? His vision told him, Yes; and he awoke and went back to his court ladies. This life is a great crucible wherein we mix all elements, and we need to add essences from the treasury of Nature to leaven the other ingredients. The product of the Great Work is fully developed Man.
GIBRALTAR: by Kenneth Morris

Here are certain places on the surface of the earth which are, one may say, sacred (or perhaps rather unsacred) to Mars the War God; the history of which has been but a record of battle, murder, and sudden death; they are the danger-spots and powder magazines of civilization. Among these the Rock of Gibraltar stands pre-eminent. In the course of five hundred years it stood some fifteen sieges; some of them among the most notable in history.

With the ancients it was Calpe, one of the Pillars of Hercules; the other being the hill called Abyla, near Ceuta on the African coast. These marked the boundaries of the world, except for the Phoenicians, for centuries; later the Greeks ventured beyond them; although always Greek intercourse with ancient Britain, what there was of it, was mainly by way of Massilia and through Gaul. But neither Phoenicians, Greeks, nor Romans, appear to have understood the true import of Gibraltar; or surely the Caesars would have crowned its heights with a great temple to Mars. Its military value first made itself manifest to the Arabs, who, when they crossed over from Africa in the eighth century, selected it as the site of a fortress. They gave it two names: Gebel af-Futahh, or the Hill of the Entrance, because it was the place where they first set foot on Spanish soil; and Gebel Tarik, the Hill of Tarik, from their Leader, Tarik ibn-Zeyad; it is of course this second name that has remained.

However, it was not until the beginning of the fourteenth century that Gibraltar became the cockpit of southern Europe. In the year 1309 the first siege took place; the rock was taken by Alonzo Pérez de Guzmán for Ferdinand IV, who, in order to attract inhabitants to a spot otherwise somewhat uninviting, proclaimed it an asylum to murderers, swindlers, and thieves, and promised to levy no taxes on imports and exports. In 1315 the second siege took place, when the Arabs under Isma'il ben-Ferez attacked it, and were defeated. In 1333, however, the governor Vasco Páez de Meira, having allowed the defences to decay, was obliged to capitulate to Mahommed IV. Almost immediately, the fourth siege began, under Alfonso XI of Castile, "The Avenger." His attempts, though heroic and pertinacious, were in vain; and he was obliged to content himself with a tribute for the rock from ‘Abdul Melek of Granada. In 1340, on October 29, as leader of the allied armies of the Christian kingdoms of Spain, he won the great victory of the Salado over the kings of Gra-
nada and Morocco, after which the booty was so great that the value of gold fell one sixteenth. He followed up his successes in 1342 by laying siege to Algeciras, where for the first time in Europe cannon were used — by the Moors defending. After a two years’ siege they capitulated, on condition of a ten years’ truce; but the King of Castile broke his word in 1349 by again besieging Gibraltar. This, the fifth siege resulted in the transference of Gibraltar from the possession of the King of Morocco to that of Yusuf III of Granada. The seventh, undertaken by Enrico de Guzmán, Count of Niebla, proved fatal to the besieger and his forces. In 1462, success attended the efforts of the Spaniards under Alonso de Arcos, and in August of that year the rock was lost to the Arabs forever.

By the ninth siege the rock fell to the Duke of Medina Sidonia, who won it from the Spanish Crown; in 1469 Henry IV was constrained to declare his son and heirs perpetual governors of Gibraltar. Ten years later, Ferdinand and Isabel created the second duke Marquess of Gibraltar; but in 1501 Garcilaso de la Vega was ordered to take possession of the rock for the Crown, and it was formally incorporated with the Spanish dominions. After the death of Ferdinand and Isabel, the duke Don Juan tried in 1506 to recover possession, and added a tenth siege to the list; his attempt was in vain. The eleventh siege took place in 1510, when the pirates of Algiers tried to regain it for the Muslim cause; the conflict was severe, but resulted in the repulse of the besiegers. After this the Spaniards strengthened the place until it was regarded throughout Europe as impregnable.

During the War of the Spanish Succession it was taken by a combined English and Dutch fleet under Sir George Rooke. The captors had ostensibly been fighting in the interests of the Archduke Charles of Austria, afterwards Charles III; nevertheless Sir George Rooke on his own responsibility caused the English flag to be hoisted, and annexed the rock in 1704 in the name of Queen Anne of England. The English government ratified the annexation, but left unrewarded the general to whose unscrupulous patriotism it was due. Since then, Gibraltar has been in the occupation of the English. Three terrible sieges, in 1704-5, 1727, and 1779-83, the last the most famous of them all, have left its ownership unchanged. From 1783, the history of Gibraltar has been uneventful.

To the militarist an interesting history perhaps; but to the rest of us a mere long and dreary record of sieges — sieges frustrated and
sieges successful, victories and defeats for the Spaniard, the Arab, the Frenchman, and the Englishman. But away back in the days of pre-history Gibraltar was the scene of an event of far greater import and interest.

Those little Barbary apes that still inhabit the rock, though so few now in number that there are probably not many who have ever seen them, are of vast importance as a proof that Spain and Africa were once united; they are found nowhere else in Europe. Over that isthmus—perhaps at that time it was not even an isthmus, but as wide a stretch of land as Spain itself—migrated in antique forgotten times the great Iberian race that preceded the Celts in western Europe, and to whose type so many of the peoples of Europe seem to be slowly but surely returning; as if they were the most permanent race stock on the continent. Ages after they merged themselves with the Celts to form the basic population of Spain, France, the British Isles, and indeed all Central Europe; it was they, in all probability, who imparted to the fusion that leaning towards mysticism, poetry, and romance, which is the marked heirloom of the Celtic peoples, and which has been their main contribution to European art and letters. Who were their leaders? Whence came they by their mysticism—that which was to blossom out in the druidic mysteries, at one time pure and undefiled; in the undying songs and stories of the Celtic bards; in the chivalry of France, the sunset-tinged dreams of Spain?

H. P. Blavatsky records it that a great race of Initiates came from Egypt, many millennia ago, crossed the northern part of Africa, traveled on dry land from Morocco to Spain, and through Spain, France, Great Britain and Ireland, building the huge megalithic monuments that dot those countries—Karnak in France, Avebury and Stonehenge in England, and New Grange in Ireland among many others—to be the seats of the Sacred Mysteries; which mysteries, together with their temples, the Ibero-Celtic Druids inherited from them. Gibraltar has seen more momentous events than its fifteen sieges; greater men than its Tariks, Alfonso, and English Rookes.
ELL, me the secret!" says a little child to a companion.

"Shan’t!" says the other, positively.

"You might, just this once!"

"I shan’t!" answers the other still more positively.

"Don’t believe there is any secret!" says the other, mockingly, and then waits to see if the other will tell, just to prove that there is.

And the proof that the secret would not be safe in the new keeping is that the interrogator supposes it possible that one who has promised to keep it can be persuaded or tricked into imparting it.

Had the alchemists a secret? The answer is: "They have!"

Why?

There are many reasons. Some of them concern the public today, and for that reason may be told without unduly trespassing upon private ground, if indeed, what is well known can be private.

There was an English alchemist who at the age of twenty-three years felt the spirit of God urging him to write what he knew. Without consulting his brethren he took the responsibility, and in the quaint language of some three centuries ago he tells us so much that he himself says:

I profess there is none that ever writ in this Art so clearly. . . . I was rather willing to have concealed the truth under the Mask of Envy, but God compelled me to write, whom I could not resist . . . nor have I willingly left anything doubtful for a young Beginner, which is not perfectly satisfied.

This wise and learned scholar tells us that those who know least often tell the most, through not having with experience learned the greater caution. He says he learned what he knew (up to a certain point, doubtless) by study of different authorities. From one he receives a suggestion, from another a light, from another the use of some philosophical medicines, and so forth.

Why does he write? "For the good of my neighbour," he says. He hopes to help those who have been "seduced by the deceits of Sophisters, that they might safely return and embrace the true Light." He writes clearly because "almost all Chymical Books do abound either with obscure Aenigmas, or Sophistical Operations, or with a heap of rough, uncouth words." "I have not done so," he says, "resigning my will in this thing to the Divine pleasure, who (in this last period of the World) seems to be about the opening of these Treasures."

It is the story of Midas over again, with the difference that the
curse applies both to material gold and also "sophick gold." Speaking of the trials of an alchemist, he says:

We judge ourselves to have received (as it were) the Curse itself of Cain, for which we weep and sigh, that is to say, we are driven, as it were, from the Face of the Lord, and from the pleasant Society which we heretofore had with our Friends, without fear. But now we are tossed up and down, and as it were beset with Furies; nor can we suppose ourselves safe, in any one place long. We oftentimes take up Complaints and the Lamentations of Cain unto the Lord, Behold whosoever shall find me shall kill me. We Travel through many Nations, just like Vagabonds, and dare not take upon us the Care of a Family, neither do we possess any certain Habitation. And although we possess all things, yet can we use but a few. What therefore are we happy in, excepting speculation only, wherein we meet with great satisfaction of the Mind? Many do believe (that are strangers to the Art) that if they should enjoy it they would do such and such things; so also even we did formerly believe, but being grown more wary, by the hazard we have run, we have chosen a more secret Method. For whosoever hath once escaped the eminent perils of his Life, he will (believe me) become more wise for the time to come. . . .

I have found the world placed in a most wicked posture, so that there is scarce a Man found, whatsoever Face he bears of Honesty, and howsoever he seems to have publick things: That doth not propound unto himself, some private base and unworthy end. Nor is any mortal Man able to effect anything alone, no not in the works of Mercy, except he would run the hazard of his Head; which myself have of late experienced, in some strange or foreign places, where I have administered the Medicine to some ready to dye, distressed and afflicted with the miseries of the Body: and they having recovered miraculously, there hath presently been a rumour spread of the Elixir of the Wisemen, insomuch that once I have been forced to fly by night, with exceeding great troubles, having changed my garments, shaved my head, put on other hair, and altered my name; else I had fallen into the hands of wicked Men, that lay in wait for me (meerly for suspicion only, accompanied with the most greedy thirst after Gold). I could reckon up many such like things, which will seem ridiculous to some; for they'll say, Did I but know these and these things, I would do otherwise than so: But yet let them know that it is a tedious thing for ingenious Men to have to converse with blockish Men. . . .

If only thou wert able to have a familiar consortship within, thou wilt not readily discern That an opinion, being but a conceited one, is without great inconvenience, even a slight conjecture shall be sufficient to procure a lying in wait for thee: for the iniquity of Men is so great, that we have often known some men to have been strangled with a Halter, yet notwithstanding they were strangers to the Art. 'Twas sufficient that some desperate Men had heard a report of such an Art, the knowledge of which such once bore the name to have.

If thou but dost do anything secretly, this wariness of thine will stir in some a zeal of thoroughly searching thee out, even to the bottom. They'll rattle of counterfeiting Money, and what not? But then if thou art a little open, and some
unwonted things done by thee, whether in Medicine or Alchymy, if thou shouldst have a great weight of Gold or Silver, and wouldst sell it, anyone would admire readily, from whence so great a quantity of the finest Gold and purest Silver should be brought; whereas such Gold is scarcely brought from any place, save only Guiny or Barbary, and that in the fashion of most small sand: but now thine being more noble than that, and in a massive form, will not want a most notable rumour. For Buyers are not so stupid, although they should (like Children) play with thee, and say, Our eyes are shut, come we will not see; but if thou dost they will even see, even but out of one corner of the eye, so much as is sufficient to bring upon thee the greatest Misery. For Silver is by our Art produced so fine, that no such is brought from any place. That which is brought out of Spain is the best, it doth somewhat excel in goodness even English sterling, and that in form of plain Money, which is transported by theft, the Laws of the Nations prohibiting it. If therefore thou shalt sell a quantity of pure Silver, thou hast even already betrayed thyself: But if thou adulteratest it (being not a Goldsmith) thou runnest the hazard of thy Head, according to the Laws of England, Holland, and almost of all Nations, by which 'tis provided that every Deterioration or allaying of Gold and Silver (though according to the Goldsmith's Balance) yet if it be not done by a professed and licensed Metallourgist, it will be accounted a Capital Crime. We have known the time that when we would have sold so much pure Silver, as was of Six Hundred Pound value (in a foreign Country), being cloathed like Merchants (for we durst not adulterate it, because almost all Countries hath its standing Balance of the goodness of Silver and Gold, which the Goldsmiths do easily know in the Mass; that should we pretend it was brought from hence or thence, they would presently distinguish it by their Probe or Tryal, and apprehend the seller); they presently said unto us that brought it, This Silver is made by Art. We demanded the reason of their saying so, They replied only thus, The Silver that comes out of England, Spain, etc., we are not now to learn how to know it, but this is not any of these kinds: which when we heard, we privily withdrew and left both the Silver and the price of it, never more demandable. We being taught by these things, have determined to lye hid, and will communicate the Art to thee who dreamest of such things, that so we may see what publick good thou wilt enterprise, when thou shalt have obtained it.

This writer uses a curious phrase about "Elias" in his work. He says:

I write with an untirried Quill, in an unheard-of style, to the honour of God, to the profitable use of my Neighbours, and contempt of the World and its Riches; because Helias the Artist is already born and now glorious things are declared of the City of God. I dare affirm that I possess more Riches than the whole known World is worth; but cannot make use thereof, because of snares of Knaves.

The Alchemists frequently speak of Manuel and of Elias — which in the Hebrew has the signification of the God-Man and evidently refers to the Divinity of Man, the Original Virtue, afterwards super-
seded in some countries by the curious idea of Original Sin. They declare their utter detestation of the desire of Gold which is at the root of all the trouble in the world. It is the Biblical "Love of Money which is the Root of all Evil." This particular writer waxes really eloquent in the style of the last chapter of Revelation, where peace comes after the storms and terrors of the preceding chapters. It is one of the most attractive and beautiful fragments of Hebrew or of Hebrewed poetry, and the Alchemists knew well what a significance it had for them, and how its language was theirs.

But the need of secrecy was absolute. They were persecuted and imprisoned and done to death by the followers of the Gentle Alchemist of Galilee because they were said to have declared they had "known Christ"; that they were pupils of Elias; that they were born of God; that they had killed the sisters of a noble house (symbolizing their imperfections); that they had the Greatest Riches in the World.

This alchemist had a pupil who appears to have possessed the indiscretion of a beginner in the Art, in some things; such was the publication of writings which his master would have preferred to suppress. The pupil was given two ounces of the "white medicine," sufficient to convert 120,000 times its weight into the purest virgin silver.

I went to work ignorantly upon multiplication, and was caught in the trap of my own covetousness, for I expended or wasted all this tincture. However, I made projection of part of it, which is sufficient for my present purpose, enabling me to assert the possibility of the art from ocular demonstration. I have tinged many times hundreds of ounces into the best silver.

If he learned the lesson of concentration, of conservation of energy from his failures, perhaps he learned something worth "120,000 times" the value of the silver he might have made. He relates at some length the story of his trials and failures, and describing the result of his next interview with his teacher he gives us an instructive little picture which shows clearly that the latter regarded his lesson learned as of more value than the mere power to "tinge" metals in the physical sense. He continues:

In these trials I wasted nearly all my mercury likewise, but I had for my consolation, the witnessing of transmutations, and those extraordinary processes which I beheld with mine own eyes, and blessed God for seeing.

In some time I met my good friend and told him all my mishaps, hoping that he would supply me as before; but he, considering that my failures had made me wise, would not trust me with more, lest I should pluck the Hesperian tree
as I chose for my own and other men's hurt. He said to me, "Friend, if God elects you to this art, he will, in due time, bestow the knowledge of it; but if in his wisdom he judges you unfit, or that you would do mischief with it, accursed be that man who would arm a maniac to the harm of his fellow creatures. While you were ignorant, I gave you a great gift, as that, if Heaven ordained, the gift should destroy itself. I see it is not right you should enjoy it at present; what providence denies, I cannot give you, or I should be guilty of your misconduct."

In parenthesis, may we not ask if this is not the alchemical doctrine of responsibility, the answer to Cain's question, "Am I my brother's keeper?"

The neophyte continues:

I confess this lesson of divinity did not please me; as I hoped so much from him, his answer was a disappointment. He further said that God had granted me knowledge, but withheld the fruit of it for the present.

Then I gave him to understand how I had discovered the skill of the water, "by which in time I may obtain what you deny, and which I am resolved to attempt."

"If so, then," he replied, "attend to what I say, and you may bless God for it. Know that we are severely bound by strong vows never to supply any man by our art who might confound the world, if he held it at will: and all the evil he does is left at the door of that adept who is so imprudent. Consider what a prize you had both of the stone and of the mercury. Would not anyone say that he must be mad that would throw it all away without any profit?"

"Had you been guided by reason you might have enough of what I gave you. Your method was to add to the purest gold but a grain of the stone; in fusion it would unite to it, and then you might go about the work with your mercury, which would speedily mix with that gold, and greatly shorten the work, which you might easily govern to the red; and as you saw how I wedded new gold to such sulphur and mercury, you saw the weight, time, and heat, what more could you have wished? And seeing you know the art of preparing the fiery mercury, you might have as much store as anyone.

"But do you not perceive by this, that God is averse to you, and caused you to waste the treasure I gave you? He sees perhaps that you would break his holy laws and do wrong with it; and though he has imparted so much knowledge I plainly see that he will keep you some years without the enjoyment of that which no doubt you would misuse. Know that if you seek this art without a ferment you must beware of frequent error; you will err and stray from the right path, notwithstanding all your care, and perhaps may not in the course of your life attain this treasure, which is the alone gift of God. If you pursue the straightest course it will take a year to arrive at perfection; but if you take wrong ways, you shall be often left behind, sometimes a year, and must renew your charge and pains repenting of your loss and error, in much distraction, care and perils, with an expense you can hardly spare. Attend therefore to my counsel, and I shall disclose the secret conditionally. Swear before the mighty God that you will,
for such a time, abstain from the attempt or practice; nor shall you at that time, even if you are at the point of death, disclose some few points that I will reveal to you in secrecy.” I swore and he unlocked his mind to me, and proved that he did not deceive by showing me those lights which I shall honestly recount, as far as my oath will admit.

All this may seem a little unconvincing to the man in the street who fondly supposes that the world undergoes an entire revolution of character in a few years or centuries. But we can consult history for the absolute accuracy of the reasons given for secrecy. There is not an alchemist who has not suffered persecutions enough to destroy any man of less tough fiber. Death has always been for the alchemist a relief from the death that all have “died daily” for their daring to take upon themselves the burden of the world. Whether we understand all the details of the case or not, we are confronted with the facts with singular monotony. There is no need to quote more than a few.

Roger Bacon, Oxford’s greatest scholar, lived a life of long and bitter persecution and imprisonment by his “brethren” of the Franciscan Order. Raymond Lully was martyred. Count St. Germain lived in perpetual persecution and danger from his enemies in spite of his, one may say, royal origin, his utter inoffensiveness, and life of perfect philanthropy. Cagliostro suffered to the death for his excessive faith in the goodness of human nature and his failure to arm himself at all points against treachery. Mesmer was exceedingly cautious, but he was bitterly persecuted all his life by the very “faculty” he was able to teach. And yet he was not known as a great alchemist. “Eirenaeus Philalethes,” the great English alchemist, wrote more plainly than any, but he took the utmost care to conceal his identity. Even then he complains in no measured terms of the bitter persecution he suffered, merely upon suspicion of knowing too much. Borri was condemned by the Roman authorities, and died in the prison-castle of Sant’Angelo. They did not kill him out of hand because they wanted to discover his secret. They did the same thing with Cagliostro a century later in the same natural or unnatural tomb, but he got away without his secret ever being discovered. His persecution in London, resulting from a few experiments in making gold in a house not far from where the National Gallery now stands, was a miserable martyrdom, in which a dishonest magistrate of Hammersmith took part. The list is endless. There were a host of so-called alchemists who were
persecuted in degree as they were supposed to know something more than other people. But the real alchemists invariably underwent the same fate when they appeared before the world: persecution, imprisonment, torture, death.

If this be so, what then is the value of studying the art of “making gold” at all? Perhaps we may gain a little light from what H. P. Blavatsky says about a certain man who found himself possessed of an abnormal power which could figuratively “move mountains.” He made a company to exploit it and much money was spent to perfect the commercial use of this. But H. P. Blavatsky wrote that it could not be used for commercial purposes until humanity had risen to a point where it could not be abused. This point may be reached perhaps in a few hundred thousand years. And it is the same point where “making gold” will also be a worthy work without being a weapon in the hands of maniacs to the harm of their fellow creatures. Meanwhile, those who, by the labors of Hercules in the service of humanity happen to find this knowledge theirs, are forced to secrecy, the greater the better. Doubtless they can use the power in some suitable way without upsetting the balance of the world by unjustly enriching some and so enabling these to oppress others.

Is it not strange that those who affect most to laugh at the alchemists are the very ones who persecute them more than the worst criminals, without any exception? Do people pursue with such terrible vindictiveness those whom they think are mere harmless visionaries? If there is any logic left in men’s actions one would be inclined to think that the lives of the victims of these official persecutions were really a threat of exposure of the rottenness of the fabric for which the persecutors stand sponsor in the eyes of the world.

Does an army really go out with all the thunder and panoply of war to repel an illusion?

Would an alchemist today be less persecuted than a century ago in London or Paris, or Rome or even Boston, Massachusetts? Who dare say that human nature has changed so utterly in its attitude towards these questions as to preclude a repetition of the invariable rule?
ANY people who would never rise from their chair to examine a bee upon the window-pane, will run with eager haste to get a nearer view of a swarm of bees. The clinging units merge into the general mass as if impelled by some collective frenzy of the social instinct. Shining eyes and jet black legs appear in fine relief against the soft, brown velvet of the body fur. The sunshine is reflected back in iridescent flashes from the gauzy kings. The insect throng is seething with intense excitement and bubbles over with abundant life.

The first swarming usually takes place in early summer. For some weeks a steady flow of honey has been pouring into the cells. Every day thousands of young emerge from their cocoons fully equipped for their lives of labor. Some half a dozen young princesses in their nursery cells clamor for freedom with shrill and angry voices. The queen is wrathful and excited and is only prevented from a murderous onslaught upon her successors by the continuous restraint of her bodyguard. A few days previous to the swarming, scouts have been abroad seeking new quarters, and at last the day of exodus arrives. The morning opens warm and bright, but even now a threatening cloud would keep the cautious insects at home. The sun is mounting in the sky. The swarming is at hand. The entire population remains under cover although their neighbors are all busily engaged among the flowers; and a peculiar throbbing note is heard within the hive as though some powerful locomotive full of steam were waiting with an impatience to begin her run. The dull vibration ceases and in the quiet pause the emigrants load up their honey-sacs with silent haste.

Suddenly a tumultuous murmur arises in the center of the hive and a dense cloud of bees issues from the portals. A note of wild, ethereal ecstasy sounds out as every bee of that melodic throng mingle her song of exultation with the general hum. The living cloud now swirls in this direction, now in that. It shifts between us and the sun and looks like some dark stormcloud strangely out of place on such a sunny day. As suddenly it veers, and now we see the sunshine full upon its front so that it seems as if the sunbeams had been captured in a silver mesh as thousands of vibrating wings reflect the flashes of white light. Upon a branch, a little blackish lump is seen to form, no bigger than a walnut; yet a moment later it has grown as big as two clenched fists. Now it has doubled as the flying insects hurl themselves upon the swelling nucleus. At last the whirling cloud has settled and the elongated
cluster, hanging pendulously down, resolves itself into a plastic mass of clinging, struggling bees that reaches almost to the ground.

So far from being the instigator and the leader of the swarm, it often happens that the flying host is on the wing before the queen appears outside, and sometimes she declines to fly so that the disappointed thousands slink crestfallen home again.

The branch is now sawn off and deftly shaken into a new hive. Laden with honey, the bees are good-tempered and easy to handle.

On taking possession, squads of bees wander through the new premises and clear away any litter that may chance to be there. Others hang motionless from the roof, but though inactive they are not idle. By some mysterious alchemy they are transmuting their honey into wax, which after some twenty-four hours protrudes in tiny white flakes from between the segments of their abdomens. The mason sisters eagerly seize the wax as soon as it appears and immediately lay the comb foundation. Others collect "propolis" (a kind of vegetable varnish found on the leafbuds of certain trees) and carefully proceed to stop the cracks and ventilation holes.

The queen, who ceased to lay a day or two before the exodus, and who is now distended with accumulated eggs, hastens to drop an egg in every cell as soon as it is built, and the common workers disperse themselves abroad in search of nectar. The queen is not an autocrat; but merely the prolific mother of a family which sometimes numbers eighty thousand. She is surrounded by a band of devoted attendants who treat her with every token of affectionate respect and yet who exercise complete control over her movements. Sole mother of the hive, the future myriads yet unborn already live within her palpitating frame. Remove the queen and the masons cease their work. The foragers bring no more nectar. The guards relax their vigilance, and everything goes downhill to ruin. Reintroduce the queen, and once again the social tide resumes its wonted flow, and measureless content finds audible expression in a universal hum.

The queen-mother is the only portal which admits the future generations to the sunlit world of labor, and just as a printer who would watch unmoved a maniac destroy a single copy of his newspaper, but would start up in indignant protest to prevent an assault on the stereotype plates with a sledge-hammer; so the bees care little for the death of maiden workers who can be duplicated indefinitely; but will defend the fertile mother with devotion even in face of death.
CERTAIN new elements are coming into the life of the world, for which no exact parallel is to be found in the history that we know.* But indeed, in respect to knowing history we are sadly limited: three thousand years gives no perspective (to speak of), and our knowledge of those three thousand is hardly more than contemptible. We learn nothing of a time when practically the whole surface of the earth was open to commerce and travel; when you might go one better than Prospero with his Ariel in the matter of flashing messages round the globe, when China and Peru might be on speaking terms, and humanity taking to the navigation of the sky. So where are we to read precedents for what is to come?

Are we concerned in what is to come? No, says your man in the street; I shall be dead and gone. What do I care about posterity? he asks. What has posterity done for me? So the one-life doctrine lands us in the quags of foolishness. Posterity might do all in the world for us, if we had the sense to consider it rightly; it might even make men of us; even something more than men. The whole past of humanity is your own past; the whole future of humanity is your own future; the whole present of humanity is your own present state of being, from which you cannot escape. The moods of all men are impinging on your consciousness; day by day you are, for the most part, just what mankind at large makes you. There is no isolation for you, splendid or otherwise.

Do you reap the whole harvest of the world in the fragment of a century that elapses between your birth and your death? Who goes out, and leaves nothing that he can learn, nothing that he can do? You shared the fate of Rome and Babylon; and you shall share the fate of America and Europe too, whatever it may be. Rome and Babylon — why, there were untold ages that you shared in before the first stone was laid of either of them; humanity was hoary before Menes was born, before Stonehenge was built, or the Pyramids; and you were still a unit of humanity. And we have not yet given the lie to Solomon: there is nothing new under the sun — not even aerial navigation, worldwide intercourse, or wireless telephony; we should find them all, probably, could we look back far enough. It is only a

*We are indeed at a pivotal point of our world's history, and we are called upon to act our part nobly, wisely, courageously, dispassionately, and justly. — Katherine Tingley
temporary fad in opinion, that civilization is but a few thousand years old. Some day we shall put it at a few million, perhaps; and find nothing to take away our breath in the estimate. Not so long ago every kind of orthodoxy put the creation of the world and man at about 4000 B.C.; and in the autumn, when apples were ripe. Fact and discovery have been winning millennials of antiquity for the race since then, and every millennium most grudgingly acknowledged by the learned makers of opinion, the creators of the orthodoxies. It will all come in time.

The nineteenth century blossomed marvelously with materialistic knowledge. Discoveries of the less subtle forces of nature — steam, electricity, and the rest — opened up a new world, or so changed the face of the old one, that life in it came to have a wholly different aspect. Prophets of the Ape and the Amoeba arose, who won half the temple of world-opinion from the old orthodoxy, and set up an altar to the new one — the orthodoxy of materialistic science. Superstition (especially the kind falsely so called) was drummed out ignominiously; ghosts and magic and gods and fairies and the soul of man, they all had to go. Let’s have something you can see and feel, and if necessary kick, said the Nineteenth Century; and wallowed in an orgy of stult and barren materialism. Of course it did not represent any truth, new or old; it was merely the reaction from an almost equally stult and barren dogmatism that claimed to be spiritual. So opinion goes backwards and forwards like the ball between two tennis players; as for arriving at anything like truth, who asks that of it?

So it was that in the midst of the nineteenth century another reaction began, and has gathered head since then, and goes on increasing. Orthodoxy in science banished, or at least banned superstition, and launched a Bull at the Unseen. I, it said, can drive spirits from the vasty deep — for spirits, let us say everything unseen with the two eyes in your head. Yes, but will they go? It was but a Partingtonian broom flourished at an incoming Atlantic. Inward worlds were opening, yet worlds perilous for the most part; investigators were attracted by the glamors of psychism, and went forth to investigate the seven circles of Malebolge, armed only with complete ignorance. Better to set out for the North Pole in a coracle or a canoe. What had orthodoxy in knowledge to say? Sometimes nothing but a sneer; which was neither here nor there; sometimes, according to her supposed principles: Push forward the investigation. So in came psy-
chism, astralism, trailing wrecked lives, sorceries, vice, uncleanness: the inevitable results of psychic dabbling. H. P. Blavatsky alone sounded the true note of warning.

Now from this standpoint only, what a pivotal point it is! Here is man, a selfish creature in his desires, who with merely this physical material world to deal with, has built for himself a hell bad enough, some think. Just working through the energy of man, selfishness has built up the present conditions: the misery of the poor, the armed camps of Europe and elsewhere, now and again breaking out into the purpose they were intended for, war; it has brought about unrest everywhere, strife everywhere. And now this new psychic world is being opened to it, with weapons a thousand times more dangerous than any physical or intellectual weapons. Can we wonder at the awful growth of secret and unnamable vices, of lunacy, of ruined homes and lives? What is it all coming to? Are we not indeed called upon to act our part nobly, wisely, courageously, dispassionately, and justly? Is not this the time when sane, balanced characters are needed — when men with understanding of the world's conditions and of their own nature are needed? Are we not called upon to face the future and play the man? Is there not now the pressing need for heroes, strong and wise, to guide humanity through this wilderness of Sin?

We should appreciate the perils of the time better if we knew the old history of the world, the history of the forgotten races. Theosophy supplies the clue, the information. We read of the fall of Rome, Greece, and Babylon, Egypt, and the rest, and can tell what conditions brought those nations to ruin. They were in many respects the very conditions that obtain in the civilized world today. There were selfishness, luxury, ignorance, vice; all those we know; and we, too, have them all. But we have a thousand elements of danger that they knew nothing of. Every great discovery of the age gives to mankind a new weapon, a new means of doing good or evil; and as long as selfishness predominates, more evil is going to be done by means of them than good. We invent airships; and immediately fall to calculating how warfare may be made more terrible thereby. We match our new Lusitanias with Dreadnoughts; our new Olympics and Titans with Superdreadnaughts. The press can be used for poisoning men's minds just as easily as it can for spreading enlightenment; indeed, more easily, much more easily, since selfishness is in the world.
Rome knew nothing of these conditions, yet succeeded in achieving her downfall without them. And then, beyond all these physical and material new weapons for evil—which might be weapons only for good—there is this opening psychic world. Where of old your "honest murderer" needed to bludgeon you on the head, and leave clues for the detectives, now he can do the work by hypnotizing some weakling, and laugh at the law. Caesar Borgia and Pope Alexander VI might pride themselves on their poisons; but their methods were puerile and their weapons crude and barbarous compared with those that might be used today. Caesar and Elagabalus went the limit (so they say) in vice, according to their light; but supposing the psychic world had been open to them to play the devil in? I venture to say the ruin of Rome would have been even more spectacular, more complete, more miserable than it was; because nations fall through their own weakness, and not by the hand of barbarians or foreign foes; and their own weakness is always the result of their selfishness and vices and the punishment always, in the long run, fits the crime.

No, we have to look farther back to find anything like a real parallel for modern conditions. We have to study Theosophical literature—particularly H. P. Blavatsky's *Secret Doctrine*. That book tells us of the fall of the race of the Atlanteans—the race that left many of those cyclopean monuments to be found all over the world, which research cannot account for. That the whole surface of the globe was known to them is proven by the fact that their monuments, their buildings, and gigantic statues, are to be found practically in every country. There was a period in their history when conditions like our own prevailed: when material civilization had been brought to a wonderful point of richness, splendor, luxury; when mechanical science had been made to yield up its arcana in the service of outward human needs and pleasures; when all that we know now of science, and more, was known and applied, and men built better, traveled faster, communicated with the ends of the earth with less trouble and paraphernalia, navigated the sky with as little danger as one might navigate a mill-pond, and made war with weapons that killed their thousands where our poor cannon kill but their tens. And to this people too, came the time of the budding-forth of psychic "powers" (so-called), faculties, and senses; when they began to function on ghostly and to us viewless worlds. They had been selfish and luxurious on the physical plane; now they became guilty of spiritual
iniquities, wickedness in high places, deadly sorceries. Magic, that had doubtless been ruled out by scepticism in their particular nineteenth century, crept in in their twentieth in lethal and soul-destroying forms. They menaced the whole future of humanity and humanity’s abiding-place, this earth. Nature, very patient with man, came to abhor them; she lost her patience; she let loose her great waters; she made the Atlantic, and rolled her billows over their fields and their proud cities . . .

You may take that as an allegory, if you wish to; Theosophy teaches however that it is very sober history. Allegory or actual fact, it is full of lessons for the men of today. Then, as now, man was at a pivotal point in his history; we may be within a few hundred, or more, or less, years from such a crisis as that which overcame the Atlanteans, or from the threat and danger of such a crisis: with us it is not yet too late to turn. But we must have heroes; we must have wise men that will take action, and the right action. We must turn the currents of human thought and action into the right channels.

Consider the life of a man: how he goes from childhood into youth, from youth into manhood, and out from the shelter of home and school to face the world and make his place in it. Consider his equipment of ideas, the various threads of motive and the sources of motive that go to make his being and character. Disentangle them a little. That “himself” is to be his instrument, his means, his criterion of life. There will be, naturally, by heredity, all the passions and desires of the animal man. There will be the great idea that he is something separate from his fellows; something that has to get on, to win this and that for itself. There will be, behind these most external parts of him, a mind that can think; more or less active there will be sundry virtues or possibilities of virtues — generosity, courage, magnanimity, constancy, patience. Going further in, there will be a soul that watches his life, a divine something that waits to be called upon and brought into daily activity. And you might go in farther and farther, and come upon diviner and diviner threads, till you arrived at deity itself: but where does he learn to look inward for these things, these higher things? They must be searched and striven for; the Kingdom of Heaven is taken by violence, and the strong attain it; but the passions, the trumpery thoughts, the instinct of selfishness of separateness, like the poor, are with us always.

Now which of these various threads of his being are called into
action by circumstance and environment? It is the universal teaching, almost, that he must get on in the world: he has to win money, place, perhaps fame, and so on. Ambition is instilled as a motive, which plays into the hands of the selfish instinct: he must win out in spite of competitors, at the expense, if necessary, of others. Then, there are books: he will have read: he will read current fiction, and gain from it a certain picture of life. Nine-tenths of the fiction of today, the stuff that gives a color to the ideas and ideals of the majority of us, harps upon one theme—passion, what we call "love." We grow into youth with the idea that that is the main and central factor in life. "Love" is the main incentive. . . . No doubt it is made very romantic, very glamorous; no doubt a kind of beauty is thrown over the whole subject: but what part of the man's nature does it play to? The soul? The divine part? The wisdom that might save the world? No; the selfish element is there; it has been fostered carefully by the teaching that instilled selfish ambition; a certain glamor has been cast over the natural animal nature. And now when that animal nature awakes, when passion emerges from its dormancy, we find the two—selfishness and passion—acting upon and inflaming each other—and how often do not wrecked or at least spoiled lives result? The passage from youth into manhood, is, we know, beset by dangers which owing to ignorance and wrong teaching the majority go forth to meet wholly unprepared for them, wholly unarmed against them; and can we wonder that men reach their manhood, as a rule, with all that is divine in them, all that is glorious, all that is in the highest sense useful to humanity, obscured?

The imagination of the world has to be turned, so that instead of wasting itself on fooleries, it shall play upon the divine heights and lighten the path to them. We must have an education that shall hold up the goal of service to mankind, and not that of winning only wealth or position; and that shall fit the children for that service. We must have a literature that shall paint the warfare of the human soul to obtain self-mastery, the ambition of the human soul to express perfectly its divinity. We must infect the imagination of the world with the knowledge of human unity, of the hidden and innate divinity of man, of the possibility of peopling the world with a race of Gods. Theosophy holds the key; Theosophy proclaims the message; the Theosophical Leaders have set in motion the only true system.
THE ROYAL ASTRONOMICAL OBSERVATORY, GREENWICH: by C. J. Ryan

One can tell the date of the first observatory, nor when the earliest observations of the stars were made. H. P. Blavatsky speaks of a celebrated astronomer living in the prehistoric ages on the lost continent of Atlantis, from whom the ancient Hindûs are said to have derived their general knowledge of astronomy, but we have no knowledge of the instrumental facilities, if any, possessed by the Atlanteans. We have no records of early Hindû observatories, though it is considered certain that the seven-storied temples of Mesopotamia were used for the purpose of viewing the stars. A lens has been found at Nimrud. The Egyptian Temples were almost certainly oriented in connexion with star-ritual. Though we know little or nothing of their methods, we have records proving that the Hindûs possessed an astonishingly correct knowledge of the exact periods of revolution of the moon and planets, handed down from remote antiquity. They had a learned science of astronomy long before the Greeks, who are frequently, though erroneously, called the pioneers of astronomy. The Hindû Sûrya-Siddhânta contains elaborate tables of the cycles of planetary motion, the recurrence of eclipses, etc., correct to decimal places. Their observations were probably connected with the astrological work in the temples.

The Arabians cultivated astronomy with great success, and during the great period of Islâmic culture many valuable observations were made. The length of the year was found within a few seconds of the truth; the obliquity of the ecliptic was re-measured; in the desert near Palmyra a degree of the terrestrial meridian was measured; and observatories were erected on Asiatic soil.

The first Observatory in Europe is credited to a wealthy citizen of Nuremberg, Bernhard Walther. It was used from 1472 until 1504, part of the time by the celebrated astronomer Regiomontanus. Then came the important Observatory of Tycho Brahe in Denmark, and a German one at Cassel. The great national British Observatory at Greenwich, near London, was founded in 1675, “for the promotion of Astronomy and Navigation,” and it has held a leading place in science ever since.

When the first European Observatories were instituted the instrumental equipment was very different from what it is today. There were no telescopes, nor spectroscopes, no photographic apparatus; no
magnetic and meteorological instruments. Measurement of the positions of the stars and the planets was impossible to be made with great accuracy by means of the simple sextants and quadrants in use in those days, and it was not till Galileo invented the astronomical telescope that the science of astronomy was put upon a firm basis of mathematical accuracy. The field of observation has so greatly increased in late years by the application of the exquisitely refined instruments of the present time that few observatories can devote themselves to more than one or two special departments of research.

Greenwich Observatory contains three very large telescopes, refractors and reflectors, 30, 28, and 26 inches in diameter, besides several smaller ones. Some of these are used for photographing the heavens only, and many important discoveries have been made with them. A photograph of the sun is taken every day when the weather permits. Owing to the well-known uncertainty of the English climate there are many interruptions to this activity, but it was possible in 1911 to get pictures on 225 days — it does not always rain in England! A special line of research is the charting of the northern stars with the object in view of getting materials to judge of the size and shape of the visible universe. This work is being done in collaboration with other observatories scattered throughout the globe.

The study of double-stars, i. e., those stars which have a companion very close to them forming a connected system, is one of the most promising branches of astronomy. By means of this we are acquiring some knowledge of the dimensions of many stars, and when they are all properly classified we expect to discover some hitherto unknown laws of the structure of the universe. Greenwich Observatory devotes great attention to this branch of observation.

The study of terrestrial magnetism is also carried on at Greenwich. Sunshine, temperature, and rainfall are recorded, and the standard "motor-clock," kept in perfect time by constant observation of the stars through the great transit instruments, is the center of a system of electrically-controlled clocks in all parts of the United Kingdom. The Astronomer Royal, who is also President of the Royal Astronomical Society, is the Director of the Observatory, and there are sixty persons regularly employed under him. Greenwich Observatory stands upon the meridian 0° 0' 0", from which navigators calculate their longitude.

Greenwich is not only celebrated for its great national Observatory,
but on account of its fine park and other attractions it is a favorite resort of Londoners. The park was enclosed nearly four hundred years ago, and commands a famous view of London and the river Thames. The Royal Naval College stands upon the site of an ancient Royal Palace, the birthplace of some of the greatest sovereigns of England. The present buildings are about two hundred years old, and present a very stately appearance as seen from the Thames. Until 1869 they were used as a home for old retired sailors, but in 1873 the rooms were diverted to the use of the students of the Royal Naval College, and the old seamen were given liberal pensions and sent away.

The College was built in the Renaissance style, after designs by the two famous architects, Inigo Jones and Christopher Wren. The largest hall is called the Painted Hall, from the interesting series of pictures of British Naval victories, portraits of admirals, and the wall and ceiling decorations by Thornhill. One of the domes of the Observatory is seen in the distance between the towers of the College.

**AM I MY BROTHER’S KEEPER?**

(A Paper read at the Isis Theater, San Diego.)

_M I my brother’s keeper?_ "What an extraordinary question!" says some one; "how can I be? seeing that I am myself ‘kept’—kept by my body, for one thing, inasmuch as it is constantly out of order and my brain hardly ever as clear as I want; ‘kept’ by my moods, despondent, gloomy, irritable, blue, green, and gray, whereas I want to be happy and content; ‘kept’ by my mind, which will always be thinking of things I want to forget and refusing to stay upon things I want it to stay upon; ‘kept’ by my desires, which for ever rush me into deeds that I know are wrong and that I really wish I did not do; a thrice locked-in jail-bird, and you ask me if I am not somebody else’s keeper! I never had a moment, a deep satisfying breath, of true freedom for myself and my will yet. I’d show you something worth while if I could get a perfectly healthy body, freedom from moods that cling about me like a coat of birdlime, freedom from the herd of desires that drag me on from morning to night, and a mind that would obey me for just one day, for just one day have no thought I did not want."
That’s one side of the case. But the fact is that in the beginning we were fitted out very well and we let all that riot of mood and passion develop about us and still allow it to go on. The body would usually get health if it were properly treated. And there is an inner place we could quickly learn to live in, from which desires and moods would be easily controlled.

Again then: Am I my brother’s keeper?

There are two unpleasant meanings to the word keeper. The prisoner has a keeper, who has him under lock and key. And the unhappy performing bear on the streets has a keeper, who makes him dance as he will.

In which sense—if not in both—am I usually my brother’s keeper?

Let us for a moment get any possible traces of egotism out of that. If you are asking the question concerning him, the “brother,” “am I his keeper?” he is asking it concerning you. “Am I,” he wonders, looking at you, “his keeper?” Are we, in fact, all “kept” by the others?—kept under lock and key as respects our better natures, kept dancing to tunes our better natures hate?

To take a very possible instance: You come down to breakfast, let us say, in a very irritable mood, and snap out at your boy when he asks you a question. That irritates or depresses him, and in such a mood he goes to school. He has now a little devil to contend with which he does not know is not himself. He infects the school to some extent and perhaps gets into a fight. And the teacher has a bad day of it. Maybe the boy has been wanting something rather badly lately, say an air-gun or an electric battery, and sees money in another boy’s locker. Another time he would just succeed in resisting the temptation to take it. Today, owing to you, he was irritable, lost his temper with a schoolmate, has his brain hot and confused, is swept by the sudden chance to get his battery, and takes the money. All sorts of things may follow: detection and disgrace; lying to escape detection; incrimination of another boy; perhaps the beginning of a career of crime with the penitentiary a few years along. For one step in any direction always open the way to another.

But your mood perhaps lasts all day. How many evil currents of consequences for other people may you not start running before you at last lie down at night? In a day or two, each current generating others, the whole town may be a little the worse because you lived in
and acted from that mood that day. *Am I my brother's keeper?* looks like a question worth meditating upon.

We cannot drive a normal man to theft, murder, or suicide; we perhaps cannot save a man *from* one of these acts who has fully determined upon it. But there are men neither normal nor fully determined, men on the border, men nearly in desperation from poverty or the impending starvation of those they love, men smarting from injustice to the very limit of endurance, men so nearly overwhelmed with misfortune that they are contemplating self-destruction as the only path left open to them. These men need but a touch to press them across the line. And some of them get that touch every day. Could it not sometimes be traced back to the effects of a mood of yours or mine, a harsh word to some one who passes it on—on—on, till at last it hits one of these unfortunates and determines his act?

But that mood of ours, maybe we ourselves got it from some other? Some one upset us last night and the upset lasted to the breakfast table this morning. If, then, we are one brother's keeper, we are another brother's *kept*!

Certainly. But you will admit that you and I are exceptional people, far above the average. We had an opportunity—and lost it. We had an opportunity to let a current of evil in the universe strike us and drop through into the void, cease to be at all anywhere. We could have wiped out the upsetting word or deed, refused to have it in mind, at any rate refused to let it color the mood of the following morning. By not doing so we entered the ranks of the *kept*. The newspapers are always publishing the advertisements of people who will teach you how to develop a strong will and magnetic personality. There are some extremely profound and secret methods of doing this. The profoundest and secretest of them all we have just hit upon. It is the power to forgive and to forget, the power to hold the mood of kindly cheerfulness against all assaults, to wipe out evil from the universe. Nothing strengthens the will, nothing develops magnetic personality, like this. And as you walk about the streets clothed with this will and this personality, there will be something in your eyes that may save some poor oppressed fellow from crossing the fatal line. You are his keeper—*from harm*, instead of the other kinds of keeper. In Sweden they have a pleasant custom. When a man gets into a street car he raises his hat and bows courteously to the other passengers. The same when he leaves. The little custom increases the
general good will, helps to make and keep a friendly atmosphere. I suppose we shall not adopt that here. But even here there are certain people who, when they enter a car, do diffuse something genial and kindly and helpful. They affect everybody for the better. In their turn those affected people, when they leave the car and go to their places of business, affect their employees and associates for the better. The day goes better; the homes in the evening are bettered. How far, before it is all spent, does that kindly person’s ten minutes in the car extend? In truth it is never spent; it renews itself as it goes along. You can neutralize evil by just letting it drop through you; you can make it a means of nourishing your own will by that same process, turning it altogether into good. But good you cannot neutralize. It gets into the evilest man, whatever struggle he makes against it. Sometime, when the evil is for the time weakened, the good that was planted in him will have its chance to show that it was there all the time. The soul of each of us is a part of the soul of the world, that which upholds all things behind their appearances. Therefore if any one of us, fully feeling himself a soul, acts in compassion for the redemption of another, such act must sometime accomplish its purpose, for there was divine will behind it. But the sometime may not be till the clear-visioned moment of death, or even till another life. We do not know where our moods come from. Who shall say that that divine mood under whose influence a man suddenly stands up in his manhood and shakes from him forever some evil that has dogged him for incarnations, is not the flower of some seed sown in his heart by a soul that once divinely compassionated him and worked for him if only by a wish? And it might even help the intending suicide away from his intent to reflect that as he walks along the street the black shadow that is upon him may fall upon some one whom he passes and start one of the long trains of evil that wind like snakes through our social life.

“Family” is a capacious and adaptable word. You could for instance extend its ordinary meaning so as to cover the prisoners in a jail. They grow into a kind of unity, affect each other, share each other’s clouds. And what clouds! In most jails there must be little else than clouds, the whole atmosphere black, black, like hell. We are told that on the night before an execution few can sleep. The blackness is deepened; the condemned man’s horror spreads about among the rest, though he is separated from them. On the morning itself they cannot eat; at the moment of the “drop” some even vomit.
This is a hideous topic. But who is responsible? In so far as we permit capital punishment are we not the occasioners of that hell-black cloud that every few weeks spreads its evil heart over every prisoner in every jail? So it is only proper that we should contemplate our own work, see the consequences of the kind of “keeping” we do for some of our brothers — men whose crime likewise might be found to tell back upon some of us if we could follow the social trail of one of those “snakes” I spoke of.

The people who happen to be at one time together in a car make a family of a sort, and can be affected for their own good by some strong genial personality among them.

And the people of a town are a family; and so out and out till the borders of humanity are reached.

What is it that you might call the philosophy of the family, the philosophy underlying the fact that we are all keepers of each other?

It is human unity, a much more intimate unity than we usually suppose.

We are of one matter, at any rate; that, no one fails to see. We are always interchanging and sharing each other’s bodies. The breath we alike expire, and which, when we are as now, together, we actually interchange, passes into the air and becomes the food of the plants which in turn are our food. Our bodies are continually passing away, intermixing, and coming back. The germs, noxious or harmless, which have multiplied a million-fold in and of one man’s blood, pass into and multiply in the blood of a thousand others. In a word we contribute our bodies to nature and from nature take them back as new ones. This goes on from minute to minute, from day to day; and birth and death only mark larger steps of the same process.

May it not be that we have here one of the secret why’s of human life? May not an atom which has once lived in and been a part of a human body, have become a little changed by that association? May it not be a little higher in the scale of being? Chemistry would not detect the change; yet the whole matter of the globe’s crust may, through the ages and ages, have been slowly rising in evolution because it has been millions of times embodied with the life of plants and animals and men.

If that be true, one of the purposes of human life would be the redemption of matter, the gradual awakening of it to consciousness, the slow conferring upon it the power to combine with itself more and
more intimately, to become more plastic, more ready to harbor life and be itself alive. In that view we are more than our brother's keeper; we are matter's keeper. Matter not only becomes one of the links that bind us together but represents one of our duties.

Science knows that all the matter in this whole universe is bound in one, everywhere connected. Gravitation is a link between the smallest atom on earth and the farthest star. It is a fact of nature that you cannot move an eyelid without affecting Sirius, and Alcyone in the Pleiades. Some of the ways in which our bodies affect each other are but a case under that great law.

Parts of this great set of facts would have been heresy, to be treated by burning alive, a few centuries ago. We don't often say heresy now. We say "superstition."

Well then, what is the next great group of facts the suggestion of which would now be superstition or evidence of credulity, just as belief in this now scientific group was heresy?

If our bodies pass about, as it were, from one to another, minute by minute, what of our minds? What of our thinking material or essence? May not thought and feeling pass about amongst us? Are words always necessary for its passage? The prisoners in the jail say that they feel with the condemned man, though they cannot see him. You wake up on Christmas Day and you find Christmas Day already in the air. You did not, of your own self alone, make that general genial expectancy; you could not do it. The whole community makes it. It surely can only make it because minds are of a common essence and share each other's waves of thought and feeling. If you want the other pole of thought and feeling, go into a jail, walk down a corridor, enter some of the cells. For still another example recall how you felt when you heard that President McKinley had been shot. Remember how your horror increased as more and more people heard the news. The news did not increase; it stayed just as it was. What increased was the number of people that knew of it. They put their horror out on the air for each other's sharing, and at last the whole country hardly breathed.

All this is "keeping" your brother, for his weal or woe—and being kept by him, creating for him the atmosphere in which he shall live and draw his breath of thought. We house prisoners like rats, and sometimes allow them to be treated very badly indeed. We allow the destruction of their health and refuse them any occupation in which
they can take lasting interest. And when they come out it is usually about as easy for them to find employment as it would be for a leper. So we force them into despair, and into fierce resentment. That is the atmosphere with which they fill their cells, which they leave behind in their cells for the next occupant. They bring the atmosphere out among us with them, spread it around, corrupt the young and infect the sensitive with it, talk and act according to it. And so, in some degree they become our keepers, their atmosphere, the atmosphere we compelled them to create and live in, mingling with ours. The under ranks of society are full of men that hate it, hate us, the respectable, hate the law; men that have been in jail and suffered, and lived year after year within the same building whose walls were every little while witnessing the horror and crime of capital punishment. They are the fruits of our method of "keeping" our brothers.

Let us remember that most people are born, and remain throughout life, negative, receptive. They take the color of the time they are born in, its habits, its beliefs, its scales of feeling. The color of our time is the worship of material success, with the dollar as its symbol. Into that atmosphere comes the mind of the new-born child. That atmosphere it breathes till its death. We fear death so much because it so very evidently marks the collapse of the only kind of success we can understand. Some of the ancient peoples, on the contrary, had no fear of it because it brought the crown and culmination of their life's effort — to make themselves free from the domination of the body. Century after century, generation after generation, they handed on to each other, to each new-born child, and so deepened, the thought of death as freedom, as full vision. We hand on in its terrible hypnotic weight the thought of death as collapse, finis, checkmate to all the thought-out play of our years.

So we make the most of the game while it lasts. Each is strenuously for himself. There is no kindly sympathy in our eyes. Even on the one Christmas Day there is but an imitation of that atmosphere which should pervade the nation every day.

Into such an atmosphere the children are born. They grow up in it and of it. They are our brothers and we are their keepers, keeping them down to this level. And the necessary consequences follow. Material success being the goal, the quickest way to it is crime. And so crime increases year by year. Death being the finis, the game is to squeeze all the enjoyment out of the body that is possible whilst
the body lasts. And the consequence is that the years of life after about five-and-thirty are getting fewer year by year. The body cannot stand the tune we want to play on it. The strings rust ever earlier.

Our conception of death is the natural outcome of our conception of the value of life. If life is for material success, then death is the finis for us, the collapse of all that we have worked for. Until we work for something else, find our ideal in some other direction, we shall know no more of death than as finis and collapse. Every nation has the knowledge of death that it is entitled to. According as you view life, so must you see death. It is either a friend, opening for you the gate to real life and vision beyond — or a black and forbidding wall which, as you approach it, falls on you and crushes you.

Life is our field of opportunity. In life, not after death, does this law hold — that one becomes according as one thinks. If a man thinks only of himself, what self is that of which he so thinks? Is it not, if you come down to the root of it, his bodily self? But death breaks to pieces and scatters to all the fields of nature the bodily self. That is to say, it breaks to pieces the man as he made himself by his thought of himself. To that extent he is done with. Truly he did right to view death as his worst and chiefest enemy.

But he who in his life went beyond himself to others, who in the best sense made himself his brother's keeper, what of him?

He lived in a self that was beyond his bodily self, that pushed outside it, that was more than it, that had forced itself to some degree into the world of human life and must have remained in the same degree conscious when the bodily self dissolved. That explains the curious fact that those who fully work for others totally lose the fear of death. They instinctively feel that they have become what death cannot touch. It is not necessary that they should have any distinct theory of death, any more than it is necessary that you should have a distinct theory about sleep before you can go to bed without terror. You know that sleep is all right, that you can trust it; know it so thoroughly that you do not have to know that you know it.

We say that the bodies of those who have died have returned to nature. The atoms are now in the winds, in the growing leaves, in the water, in the earth. They are where they belong for the time. Where is the mind, what we call the heart, of the man who worked for others and who is dead?

He worked with that conscious spirit of good which is in every
heart and without whose constant pressure there, little as we may feel it, humanity would long ago have ceased to progress and vanished in the flames of its own animalism. In his love for others he perhaps unwittingly and again without a theory, loved this; got attuned with, and to his degree, at one with this; and, as part of this, remained and remains with humanity, an added protective and inspiring force. According to his degree he is an inseparable part of the light. Such, says Theosophy, is the nature of the rest-time between incarnations of those who have worked for the helping of others, who have made themselves their brother's keeper. It is a rest-time and a purification; a strengthening for future noble service in the next rebirth.

"Charity begins at home" is a profound saying. For home here means the heart, and charity compassion.

Yet of course there is the home in the ordinary sense, and there are usually children in it. How are they trained? What sort of America are they taught to think of? You have got the next generation in the house with you, the America of tomorrow. Some sort of training the children get, of course; to make the best of themselves, perhaps—but to make it for themselves. It is on themselves that their attention is bent and kept and remains. And there is the whole evil, all evil, the root of all evil that weighs humanity. It brings with it that ideal of life as the field for the attainment of material success. And in that is hidden our fear of death, the cause of our diseases, and the cause of our blindness to the meaning and possibilities of life. The divine nature is easily awakened in a child, by parents who know of their own divine nature, and also by those who do not but wish to. For in trying to awaken it in the child they will learn of their own. The first step is the idea of service. Service is the keynote of our question, *Am I my Brother’s Keeper?* The idea of service calls the soul into action; it generates the sense of honor; it warms and enriches the whole nature; it is the real patriotism; it is the reigning spirit of the only homes that are blessed and happy; it brings light and joy to the mind; and it leads to an easy victory over the lower nature. Yet it is the one thing the children are not taught, this one thing from the want of which flow all the evils of human life, all its pains. To think out towards others, feel with them and act accordingly—this is the missing note in human life for the want of which all is discord.

Suppose a child asks you why the prisoners are where they are. What would you say? Your answer is vital to the child's moral
growth. You might say of one prisoner, "Because he's thieved and ought to be punished." You have now hypodermically injected the poisonous idea of vengeance. But you might say: "Because he's thieved and we want to help him to find his better nature." "To help him"; you have sounded in the child's ear the missing divine note in human life. And when he grew older he would understand the direction towards which prison reform should go. Why should it not be our chief wish to help the prisoner? It does not follow that we should therefore sentimentalize over him and take him ice-cream.

Really therefore it is a very simple beginning that is wanted of us all: just a little change of attitude, the daily attempt to hold a kindliness of mood, a patience, a readiness to overlook things, a going out in thought towards others. Then the dropping of the thought of death as finis and collapse. There is the soul in us all, that luminous watcher of our lives and our efforts and our pains. It knows its business. It will not let any part of us die that was worthy to live. We can go on in perfect confidence. Life is for something and whoever answers to that for in any degree will not die. We cannot expect to be very happy just yet. We must learn to be happy without being happy. While there are half-a-million men on the battlefields of the world; while there are a hundred thousand or so behind the prison bars in our one country; while the cities are full of the poor who do not know where to turn for the next mouthful; while the children are crying in the factories; while the young girls are selling themselves in their thousands; while disease is nearly universal; while — you can fill in the picture, you cannot make it too dark — while all this is going on, the community of atmosphere, of mind and feeling, must make real happiness quite impossible. But yet, as I said, there is a way of being happy without being happy, of being happy in ever outgoing kindliness, in service and readiness to serve, and in hope for humanity's future. For there is hope, well based. Humanity has been many ages without seeing the cause of its own troubles. But once that some few, some sufficiency, do see, the idea and vision will spread around the globe like the spreading sunrise of Christmas Day. And that may be very near now. Let us, as Katherine Tingley has advised us, send out our hope with daily conscious effort. It will strike sad hearts here and there from the very moment of our attempt. And our growing success will tell back most divinely fructifyingly upon our own inner natures.
TITIAN’S “SACRED AND PROFANE LOVE”: by C. J. Ryan

The true subject of the magnificent picture by Titian which is here reproduced is still a matter of dispute. It is generally called “Sacred and Profane Love,” but why it is difficult to say. The original is in Rome, in the Borghese Palace, and is one of the greatest treasures of the Eternal City. Though somewhat in the style of Titian’s illustrious contemporary, Palma Vecchio, and the product of the painter’s early manhood, it bears the unmistakable marks of the great Venetian’s genius. The Venetian painters were supreme masters of color, and the magnificence and opulence of their native city reflect themselves in the masterpieces of Titian, Giorgione, Tintoretto, and the rest. They cultivated rather the sensuous than the intellectual or spiritual side of human nature, but they transfigured the events and objects of common life in a grand and lofty manner which was a fitting expression of the love of splendor characteristic of the proud citizens of the Mistress of the Seas. The contrast between the rich and glowing pictures, filled with the pride of life, of the Venetians, and the thoughtful, mystical and intellectual works of the Florentines, is very striking.

The “Sacred and Profane Love” well illustrates Titian’s mastery of the human figure, the nobility and dignity of his composition, his skill in drapery and his appreciation of landscape. For those who have not seen the original the harmony and glow of the color must be left to the imagination. Artists and connoisseurs have spent infinite labor in trying to probe the secret of Titian’s marvelous color, but with little result. It was no trick process, no ingenious manipulation of certain special paints or prepared grounds; it was pure genius, and as such, incommunicable. Michelangelo said of him: “That man would have had no equal if art had done as much for him as nature.” He was referring to the fact that Titian was not specially distinguished for the severity and majesty of draughtsmanship to which he himself had sacrificed so much. Yet Titian was deeply learned in the mysteries of the human figure, and his skill in drawing was undoubtedly great.
ARCHAEOLOGICAL NOTES: by an Archaeologist

HUMAN REMAINS IN ENGLAND

The most recent discovery of ancient human remains in England — those of a man of very great antiquity and described as more animal in his type than any other, and as perhaps not even having possessed the power of speech — is exercising the minds of anthropologists. No doubt the remains will be hailed by the advocates of different theories as supporting their several beliefs; but the fact remains that the various specimens of ancient humanity so far discovered in various parts of the world do not as a whole lend themselves to any of the conveniently simple and precise schemes of human evolution propounded by modern theorists. On the other hand they do illustrate the evident truth that the branches, twigs, leaves, and leaf-hairs of the various human ancestral trees are as numerous as the sands of the shore. The remains found are sometimes of low type and sometimes of a type equal to that of the average man of today; and both kinds are found in ancient strata as well as in recent. The balance of probability is that any remains found would be those of wanderers, nature-dwellers, and cast-aways; and such remains are being deposited today for future anthropologists to find. For we have among us men of type as decadent as any that have been found. But even though it were true that civilized man has so evolved through rising degrees from a kind of animal, the wonder is all the greater. For either that animal ancestor must have possessed latent within the cells of his brain the potentialities of a very god, or else he must have been assisted by an equally mighty power from without. In any case the evolution of the human soul claims our best attention, whatever conclusions we may come to as to the evolution of the human body. In speculating upon these human remains, a Theosophical critic would consider that men of science are not reasoning on a broad enough base, but are too eager to proceed from data to conclusions. This is contrary to the customary patient and careful methods of scientific procedure, and is probably due to the incubus of nineteenth century mechanicalism in evolutionary theories. An interesting commentary on the above is afforded by the following.

A writer in The American Antiquarian (October-December, 1912) says that anthropology is the science of the future; but that its subject, though closer to us than that of any other science, is the least known of all. There has been much accumulation of data, but little
has been done with it except classification; of deduction (induction) and philosophy there has been practically none at all. We theorize less today than formerly because we have more facts. "This mass of material," says he, "is so immense as to discourage philosophizing." And then, by a curious assortment of metaphors, "The great storehouse of facts and observations is ready to burst forth into conflagrations of great philosophies when the geniuses shall arise who can furnish the divine sparks. But the accumulation of facts goes steadily on and the genius has not yet arisen."

A student of Theosophy may be excused for referring to the works of H. P. Blavatsky, especially *The Secret Doctrine*, to those of W. Q. Judge, and to unnumbered expositions and commentaries on these works by the pupils of those Theosophical teachers. It seems unbelievable that an anthropologist with an open mind anxiously in search of a clue for the marshaling of facts should not be able to find it in *The Secret Doctrine*; but the time is coming when this book and its teachings will be more widely known. Already, however, these teachings have exercised a considerable influence, directly or indirectly, upon scientific ideas, notably in connexion with Atlantis. It is regrettable that many perversions and misrepresentations of Theosophy are current, which discourage serious people from studying it further; but in time the truth will prevail over these misrepresentations which constitute such a fraud upon the public.

We call attention to the admission that the facts accumulated by anthropology do not support the existing theories, but on the contrary throw these theories into confusion and confute speculation; for this is what Theosophical writers, following H. P. Blavatsky, are always maintaining. It is quite clear that the actual truth about man's past history is on a far vaster scale than any anthropologist imagines, and surely this might have been expected on *a priori* grounds to be the case. It would take endless time to arrive at the truth inductively from the comparatively few facts available; and the process would be attended by endless framing and giving up of hypotheses. But with the clues furnished by Theosophy the case is different.

But there is another obstacle which hinders the acceptance of this help from Theosophy. Theosophy is all of a piece, and its teachings as to anthropology are knit up with its teachings in other matters. Hence the adoption of the teachings about man's history involves an assent to many other teachings; and not all anthropologists may be
ready to take such a step. For instance, the biological theories which obtain today with regard to man's history will not square with the ethical teachings of Theosophy. These biological theories pair off naturally with what may be called a "deterministic" view of human life, whereby man is regarded as the toy of various inexorable laws and forces, especially biological forces. Theosophy, however, lays the greatest stress on the spiritual nature of man and asserts the freedom of his spiritual will from the pulls and pushes of the forces that rule in the lower kingdoms. Again, the idea that man's present status is the culmination (so far) of a single line of ascent from animal ancestors will not square with Theosophical teachings; it is opposed to the facts, and the facts confute it — which is what our friend above is complaining of. Human history proceeds by ups and downs, its course being cyclic, not rectilinear; civilizations rise and fall; the life-story of races is the same as that of individuals — they succeed each other, and each has its beginning, its culmination, and its decay.

The great genius or prophet, with the divine sparks, is likely to appear in the usual humble guise, and to be teaching abroad while people are turning their backs and looking for a king on clouds of glory. Great is the daring of him who calls for the truth; for he may unexpectedly confront it and find it more exacting than he anticipated.

The American Sphinx

The Egyptian Sphinx suggests the American Sphinx, and an article in The American Antiquarian (October-December, 1912) is entitled "The Riddle of the American Sphinx." This is the Serpent Mound of Adams County, Ohio. The mound takes the form of a giant serpent; the head is expanded as a triangle, and a smaller protuberance within that space is supposed to represent an egg. The serpent is covered with grass, but stands out quite plainly, rising as much as four feet in height and having a length of possibly a quarter of a mile, counting all the coils. The writer mentions the serpent symbols in Asia and asks whether the builders came from Asia to America or went from America to Asia.

But there is no need for any such narrow theory. Why assume that the builders were the same in both cases? Also, to account for the use of the serpent symbol in all the places where it is found, we should have to amplify our theories of migration very considerably. The fact is that the Serpent is one of the most important symbols of
the ancient Wisdom-Religion, and as such was used by all who knew of and venerated that culture, such as Jesus. Moreover, it was held (as to a less extent it is held today) that there is efficacy in the representation of symbols. Sacred symbols were therefore multiplied as much as possible, as we find figures of the Buddha or Sanskrit formulas carved far and wide. The symbology of the Serpent is an extensive and profound subject, much information concerning which will be found in *The Secret Doctrine*. Contemporary Red-men venerate both the symbol and the animal itself, as we know. The Serpent is a symbol of Wisdom. It is so mentioned in the Bible, as for instance in the maxim: “Be ye wise as serpents and harmless as doves.” The Serpent, however, has been called the tempter of man; but then this is its way of teaching him. It means that we have to master our powers and grapple manfully with our own nature. The mystery of the American Sphinx, then, is simply that it is an emblem constructed by people who venerated that symbol and that for which the symbol stands.

**The Blue Spot**

The Journal of *The American Medical Association* has an article which states that the Navajo Indian babe invariably has a blue spot at the base of the spine, and that this mark has also been found in Chinese, Japanese, Malays, Koreans, and Burmese. The spots resemble bruises received from a fall, and may disappear in a few years or persist until later in life. One investigator found them present in 94.7 per cent of Malay children; and another found only two per cent in children in northern Italy, which he attributes to Mongolian heredity. In Tunis, Africa, it was found to be common, but only among children of brunette type. In Europeans it is rare; but observers agree that it is not peculiar to Mongolian races. The fact that some apes have such a blue mark will undoubtedly send a spasm of joy up from the rudimentary tail of some advocates of the ape-theory of human descent. If this mark is an indication of race, it would seem to carry us further back than the usual divisions of humanity recognized by anthropologists.

**Woman in Ancient Egypt**

The British Museum has acquired by gift a Theban version of the *Book of the Dead*, beautifully written, and containing additional ritual matter and some information about the lady by whom, or for whom,
the version was made. She was a Princess, daughter of the last of the priest-kings of the Twenty-first Dynasty, and the mummified forms of her and her royal parents can be seen in the Cairo museum. She is described in the papyrus as “Worker or Maker of Rolls of Amen-Ra, King of the Gods;” and she was also a musician, a priestess of Amen, and Chief Lady of the Ladies of Amen-Ra. This illustrates the fact that it is not Christendom that can claim a monopoly or priority in the honor of woman. Woman was honored as prophetess and counsellor by our “barbarian” ancestors, people Christianized with difficulty. Evidently the subjugation of woman marks a retrogressive phase in the history of a race or people; and times of enlightenment are marked by the proper balance and relation between the sexes, each in its own natural sphere. How obvious these simple truths to thoughtful minds!

The Phrygians

With reference to the project of sending a Danish expedition to explore the monuments of ancient Phrygia, a writer in The Illustrated London News gives some particulars about them and also some conjectures with regard to that mysterious kingdom.

The excavation of the central site, he says, is most interesting and important for the following reasons. The monuments are of an extraordinary and enigmatic character. The kingdom (800 to 650 B.C.) occupies a midway place both chronologically and in geography, between the Asiatic empires and the Greeks, between East and West. The origin and ultimate fate are involved in obscurity. We have not even a name for the central site; and Sir W. M. Ramsay has called it Midas City (which has a modern Western sound), on account of the principal monument, which bears the name of a Midas, a favorite name of the kings. On a cliff nearly one hundred feet high, cut back to a smooth face, an interlacing fret design stands out in relief over the whole expanse. At the foot is a small false door, and at the top the rock has been shaped into a noble pediment, like that of a Greek temple, and inscribed with large Greek-looking Phrygian characters.

At Ayazinn, some distance to the south, are the Lion Tombs, one of which has two lions guarding its portal, which have been compared to the lions over the gate of the citadel at Mykenae. The other has lions and a relief of “two warriors in crested helmets attacking a strange Gorgon creature.” Of what race, says the writer, were these Midases, who to the Greeks seemed so godlike and who left such
legends of their wealth? Whence did they derive their sculptural art? Whence did the Phrygians get their alphabet? There are many ruins to explore in search of the answer to these questions.

The Phrygian goddess Cybele is mentioned by the writer, and it is interesting to remember that Vergil makes Aeneas visit Crete in search of the ancestral home of the Trojans, which an oracle has bid him seek. And Anchises says:

Crete, the isle of great Jove, lies in the midst of the sea, where is Mount Ida and the cradle of our race; they dwell in a hundred great cities, a realm of great riches; whence, if I recall the tale aright, our mighty father Teucer was first borne to the Rhoetean shores and chose a place for his kingdom. Not yet were Ilium and the citadel of Pergamus founded; they dwelt in the depths of the valleys. Hence the mother who dwells on Cybele, and the cymbals of the Corybantes, and the grove of Ida; hence the silence protective of the sacred mysteries, and yoked lions drew the chariot of their lady. Come then and let us follow where the commands of the gods lead, let us propitiate the winds and seek the realms of Cnosus.*

In view of the recent discoveries in Crete, and especially at Cnosos, the above is suggestive; for here are connected Cybele — a Phrygian deity — Crete, the Trojans, the ancient mysteries, and the lions. There is a Mount Ida in Phrygia as well as the one in Crete. The allusion to the sacred Mysteries, protected by silence, is important. Historians are concerned with attempts to apply the law of analogy in determining the origin and racial affinities of the Phrygians, with a view to fitting this kingdom into a niche in the historical fabric. But we need a larger range of facts yet, before we can frame any theory satisfactory to all parties and consistent with all demands. To illustrate this point by a single instance: the discoveries in Crete have changed the whole aspect of the question as to the relation between the Greeks and the powers of Western Asia. In the same way unexpectedly facts are likely to come to light at any time, compelling a revision

*Creta Iovis magni medio iacet insula ponto,
Mons Idaeus ubi et gentis cunabula nostrae.
Centum urbes habitant magnas, uberrima regna;
Maximus unde pater, si rite audita recordor,
Teucrus Rhoetelas primum est advectus in oras
Optavitque locum regno. Nondum Ilium et arces
Pergameae steterant; habitabant vallibus imis.
Hinc mater cultrix Cybelae Corybantiaque aera
Idaeumque nemus; hinc fida silentia sacris,
Et iuncti currum dominae subiere leones.
Ergo agite, et divom ducent qua iussa sequamur,
Placemus ventos et Cnosia regna petamus. (Aeneid iii. 104-115)
of our ideas; and therefore such theories as may be devised now must be regarded as temporary pegs. In *The Secret Doctrine* we find the following mention of Phrygia, of related places, and of the Mysteries. Speaking of certain Powers known to the Greeks as Titans, and to the Semites as Kabirims, the author says:

They were universally worshiped, and their origin is lost in the night of time. Yet whether propitiated in Phrygia, Phoenicia, the Troad, Thrace, Egypt, Lemnos or Sicily, their cult was always connected with fire; their temples ever built in the most volcanic localities, and in exoteric worship they belonged to the Chthonian divinities. Therefore Christianity has made of them *infernal* gods.

The Phrygians seem to have been quite Greek in their type, and their kingdom to have been regarded by the Greeks of Ionia and the Troad as great and half-divine; they were reputed the oldest people, their language the original language, and their kings the companions of the Gods. Yet, so far as archaeology can make out, their kingdom succeeded a still older kingdom, whose remains are vaguely called Hittite — a name that covers a multitude of sins of omission. Clearly we have here support for the Theosophical teaching that present civilizations were preceded by civilizations of a higher type — grander, simpler, more spiritual, though not so versatile and so cunning in material arts. This is quite in accordance with evolution; for every great Race passes through its successive phases, and these bygone spiritual empires were the earlier chapters in the history of the great Race whose succeeding chapters are now being unrolled. But this does not imply continued degeneration; for the cycle of a Race includes a fall into materiality followed by a regeneration or resurrection, and we are now about at the turning-point. These semi-divine kings were evidently Kings in the real sense — that is, as Homer defines it, men to whom Jove has given the scepter, men possessing the inherent right and ability to teach and direct others. After these Teacher-Kings, versed in the Mysteries which the ancients regarded as so sacred, came kings who ruled by luster or strength; kings who claimed, but did not possess, the divine right; until now we look in vain for any vehicle of the true governing power and are forced to put up with delegates and committees to manage our affairs. On the whole it is not probable that anthropologists will find much in ancient Phrygia to favor the pithecoid hypothesis of man’s origin, though it is conceivable that the present style of hats may have been evolved from the head-covering worn in that region.
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THE LIBRARY OF NINEVEH

Turning to the records of ancient civilization, we find that literary culture in the Tigris and Euphrates region is older than has been supposed. An examination of the tablets found on the site of Nineveh, the remains of a library, shows that many of them are copies of a still more ancient literature. The subjects include those pertaining to dictionaries, commentaries, and critical works; and many bear endorsements testifying that they are faithful copies of originals. But the matter is set at rest by the discovery of a tablet which consists of a letter from the king, Asshurbanipal, to an agent, authorizing the latter to search out and bring every book he can find in the land, without regard to the proprietary claims of the owners. Hence much of this literature must go back to Chaldaean times. As time goes on, the discoveries of archaeology will confirm more and more the statement that civilization is of very great antiquity, and that we ourselves are the heirs to a knowledge which we have not as yet fully inherited.

SONG: by M. R.

The singer rose and faced the audience, a smile of confidence upon his face, and in their eyes expectancy — and something more, a half-unconscious call, a challenge to the singer; as though one cried: "Show us the light that shall dispel the darkness of our hearts! Unveil for us the mystery of beauty, that we may forget life's woes and worries! Reveal the joy of life!"

The soul came forth and stood upon the threshold of the visible. In that sweet presence the singer's personality bowed reverently and became an instrument in a master's hand, responsive to his will, vibrating to the touch of his thought, with emotions trained to the service of song, and with passions purified by dedication in sacrificial fire to the cause of art. . . . And Song was born into the world.

The singer ceased, and there was silence. Then the applause broke forth impulsive, generous, exuberant.

The soul withdrew into the temple of the heart, the shrine of the invisible, leaving the singer to receive the well-earned tribute of applause.

A cup of water is a little thing, but to a man lost in a burning desert it is a boon for which he gladly gives all that he has. And is not song like water in a parched land?
“A moment of forgetfulness, no more,” you say — and yet a boon that men count priceless, perhaps rightly so. Why?

Because of a moment of forgetfulness of self, of the obsessing self; of the tyrant that holds the mind a prisoner in the dungeon of his desires and avarice, his loves and hates, his wants and woes; a moment’s freedom, in which we know that beauty, joy, and life are one. Forgetfulness of life? No! Rather of death, the living death in which men live, or think they live, pale shadows of their true selves; forgetfulness of remorse, that like a ravening wolf-pack hunts the harassed heart; forgetfulness, that for a moment opens a long-closed door and lets out a ray of light from the enchanted palace where the soul sits waiting for the awakening to Life from the death-slumber men mistake for life.

A cup of water in a thirsty land indeed: water of Lethe for the dead in life — such is Song.

THE HUNSTMAN’S ELEGY: (Welsh Air: Marwnad yr Helier)
By Kenneth Morris

HOME is the Chieftain now, home ’neath the mountain brow,
Quiet in Bettws of dark-waving yews.
No more he’ll ride to hounds, when the blithe bugle sounds,
Shaking from brake-frond and thorn-leaf the dews.

Frosty December days, better with him than May’s,
Will he dream over, again and again?
When through the wan-sunned air scarlet coats trailing there
Flamed through the woodland bare, streamed o’er the plain?

Or will his long, long dream wander by the otter stream
O’er Fforest Fawr to the dark little tarn
Where Llygad Llwchw’r’s wave slides from the otter’s cave,
Far in the wilds of the cloud and the carn?

Will he hear hunting-horn shout through the misty morn?
Will there be brake and thorn, yellowing and wan?
Will there be salmon stream where the dead, griefless, dream?
Will the red berries gleam, there where he’s gone?

Home is our Chieftain now, home ’neath the mountain brow,
Home from gray Bettws of dark yew-trees seven.
— Twsh! He’ll but bide his hour; he’ll find no Fforest Fawr,
No Carreg Cennen tower, yonder in heaven!
IN THE COLUMBIA NATIONAL FOREST:
by M. G. Gowsell (late of U. S. Forestry Service)

ERHAPS nowhere else in the United States has Nature lavished such wealth of forest and stream, or such magnificent scenery, as is found in and tributary to the Columbia National Forest, in southern Washington. 'Tis here that the Columbia River, eagerly seeking a way to the sea, broke through the Cascade Mountains, leaving a gateway to a region of vast agricultural wealth and unknown possibilities.

Less than one hundred years ago what is now known as the Northwestern States was a veritable No Man's land. Unlike the other territories which the United States had from time to time added to its original area, it was neither purchased nor annexed by conquest, but was in every respect a distinct triumph of the American pioneer. While nominally held subject to Great Britain, this territory was practically governed by the Hudson Bay Company, a British private corporation. And although it was then known that the country offered many natural inducements to the settler, he was ruled out in favor of the hunter and trapper. This condition lasted for many decades. And for nearly fifty years after President Jefferson authorized the Lewis and Clark Expedition, the ownership of this region remained in question. Many other nations looked forward to possessing it, particularly Russia and Spain. But the country was totally ignored by the United States, notwithstanding; and its final disposition was left to popular achievement, through the dauntless enterprise of American pioneers.

Woven about this far-western setting, are many interesting and picturesque Indian legends. These deal with the origin of the Red Man, the origin of fire, and even of some of the snow peaks of the Cascade Range, besides much of the local phenomena. Most of the American aborigines have held that the animal kingdom antedated man. And so, in common with many another Indian legend, the Indians of this country have deified the "animal people," the shrewdest of which was Speelyei, the coyote. He was looked upon as gifted with supreme power. By virtue of his shrewdness, he was chief of the animals. He was also the friend of "people." He had only to bid people to appear, and they "came out."

According to the Okanogan account of the Red Man's origin, there was once an island, far out at sea, peopled by a race of white giants.
Their chief was a tall and powerful woman, named Scomalt. These giant inhabitants were given to warring among themselves. This used to anger Scomalt. One day she drove all the fighters to one end of the island. Then she broke that end of the island off, and pushing it with her foot, caused it to float far away over the sea. The new island drifted afar; and all on it perished, excepting one man and one woman. These were saved from starvation by catching a whale and feeding upon its blubber. Finally, after building a canoe, they escaped from the island. After many days of paddling they came to the mainland. But not until then did they discover that while they had been in the canoe, the sun had turned them from white to red.

Numerous fascinating myths center about the Columbia River, the Indian name for which is "Wauna." One of these relates a mighty struggle between Speelyei and Wishpoosh, the greedy king beaver. This combat is alleged to have resulted in breaking down the walls of immense lakes in the interior, letting their waters through the mountains, and thus accounting for the great river and its canyon.

The Columbia National Forest is but one of similar reserves which form a chain stretching from British Columbia to California. And save where forest fires have done their deadly work, they lie like a blanket of unbroken forest solitude, from one end of the Cascade Range to the other. The word "cascade" becomes a fitting adjective when applied to such mountains as these. For it would be a difficult matter to plan a journey within the wide boundaries of these National Forests so as to escape for one hour the sound of running waters. Here, timber and waterpower are interdependent. The immense areas to the eastward, which have but recently been reclaimed through irrigation, rely absolutely upon an efficient protection of this vast watershed. These reserves recall the old parable of the Talents, a few of which have been placed in a nation's keeping, for wise investment, for the building of homes, and for the perpetuation of old and new industries, as well as for those yet to be.

Of all agencies destructive to these varied interests, fire has and will continue to take first place. The average annual loss in the United States through forest fires amounts to over $25,000,000. But these figures only represent the damage to standing trees. It would be extremely difficult to estimate in money the impairment of the watersheds, losses in young tree growth, damage to soils by erosion, or the loss of crops, stock, buildings, and general improvements. Then there
is an average yearly loss of seventy human lives. In addition to all this, there is the lowering of the moral tone of whole communities thus afflicted. This is a matter too little considered.

In remote times there were but two main causes of forest fires, namely, Indians and lightning. Indians were in the habit of firing forest and other ground cover, for the purpose of driving game, and also to induce the growth of berries. Lightning, it would seem, has been a constant factor in starting forest fires. Exhaustive research into this subject, with the causes, extent, and effects of forest fires in general, has been made the subject of two able bulletins, by Fred G. Plummer, Geographer of the U. S. Forest Service.

Evidences of ancient fires are common, and are found all over the Columbia National Forest. Results of more recent fires are shown in the accompanying illustrations. The duration of this “ghost timber” varies with the species and the diameter of the trees affected. Usually the fire-killed trees begin to decay in that portion of the sapwood immediately next to the bark. Wood-boring larvae and beetles are the common agencies in bringing this about. At the end of some five years the sapwood is honey-combed with their borings and begins to break down through decay. The work of destruction is then taken up by a larger beetle, which makes large mines in the heartwood; so that in some ten years, trees less than three or four feet in diameter will have fallen. This “down timber” greatly adds to the danger and the severity of future fires.

As a matter of economy, the Forest Service is desirous that recently fire-killed timber be logged, wherever practicable, and every inducement to this end is being made. Tests as to the comparative value of manufactured lumber from fire-killed trees and that taken from the green tree, show that there is but little difference in quality, the heartwood being practically the same in both.

Protection of forests from fire is by far the greatest task the National Forest administration has. The number of people going to these forests for summer outings increases with the means of transportation, whether it be by railroad, wagon road, or trail. And as the remotest spots are now being made accessible to the sightseer and the camper, so are the dangers of fire increased. But it must be borne in mind that the National Forests were set aside for the use of the people, and that the use thus made of them is not considered one of the least. The policy of the Government is to put every feature of these
reserves to their maximum use, whether it be that of waterpower, grazing, mining, lumbering, or homesteading. Where a tract of land has been found suitable for the latter it has been segregated and thrown open for settlement.

Fire protection for the National Forests was immediately recognized as the first necessary measure for the successful practice of forestry. To make this possible, thousands of miles of patrol trails had to be built, and telephone communications established with remote points, so that help could be called for whenever the necessity arose. Tools for fighting fires are now kept at advantageous points. Lookout stations have also been selected, where daily observations are made during the dry season. A man with a thorough knowledge of the country, and with the aid of a large-scale map and protractor, is thus enabled to locate the exact point at which the first smoke may appear.

Through the educational campaign the Forest Service has carried on in regard to forest fires, and the tragedies that were coupled with immense losses of timber during the summer of 1910, the West has become fully aware of the necessity for co-operation; and in several of the western States there are large numbers of patrol officers maintained by the States, but co-operating with the Forest Service.

SCIENTIFIC NOTES: by the Busy Bee

O construct a typewriting machine which shall take down dictation directly from the sound of the voice is perhaps difficult but it is not impossible. Experiments in this direction are described in a scientific magazine, which gives diagrams and pictures of the imperfect apparatus so far made by an inventor on these lines. The principle is that sets of reeds, or of resonators, shall be so tuned as to vibrate responsively to various vocal sounds; and this is the main difficulty, for, once this system has been perfected, the devising of electrical actions to operate the type-bars is easy. There is evidently one valuable use which such a machine would have in addition to the use immediately contemplated. It would entail upon the speaker the greatest care in his pronunciation; for every slightest fault would be faithfully and mercilessly reproduced on the printed page. The machine would be as unaccommodatingly
exact as a parrot in copying the peculiarities of the speaker. Whatever might be the intervening mechanism, it is clearly of advantage to have such a connexion between spoken sound and written symbol, so perfect that the one would be the exact counterpart of the other. This would be an invaluable means towards correcting and standardizing pronunciation, especially of English, a process which seems to be an essential preliminary to any adequate reform in spelling. Of course, if the machine had but a small number of resonators and a small number of printed symbols, its efficiency would be correspondingly limited and its delineation of sounds approximate only. But the imagination conjures up images of a machine sufficiently flexible and multifarious in its parts to represent the slightest differences in pronunciation by differences in the shapes of the letters produced. A public speaker could then be trained before such a machine; and we can imagine the teacher telling him to speak the tails of his $y$'s straighter or the circles of his $o$'s rounder.

A newspaper paragraphist brings up again the following matter, which has often been considered before, namely, that as light takes many years to travel through space to the fixed stars, the past history of our earth must be continually spreading itself through the immensities of the ether; so that, at the Pole Star, for instance, the events of 1869 are now being unfolded in waves of light, for the inhabitants (if there are any) to see. And we have only to take still more distant stars — and to distance there seems no limit — in order to get back in the same way to any distant point in past history.

This illustrates, among other things, the impossibility of excluding wonder from our philosophy, no matter how ordered and precise we may endeavor to make that philosophy. For the above conclusion is inferred from scientific data and reasoning. You may make your geometry never so straight and angular; but, when the lines are produced, they will stick out into the infinite in many-horned dilemmas; and though we may strive to make life simple by discarding from our theories everything that will not fit in, we still need a vast lumber-room for what we have left out.

Physicists will sniff in scorn at Theosophical ideas about light as Nature's great storehouse of records; and then come out with a proposition like the above. They prefer their own marvels, evidently. The Theosophical teaching is that every event is recorded by a natural
and inevitable process, and that the records are recoverable, so that nothing ever is or can be lost. Thus the world’s history is in safe keeping; for it cannot be obliterated, and its recovery depends on whether or no there are or will be people whose knowledge may suffice to enable them to recover it. But physical light is only one grade of a manifold power. The word “light” is connected with vision but not with that alone, as physicists will admit. It is a mode of motion, a form of energy, a substance (call it what you will) which may result in vision or may not. Its recording function is known in photography. Anal­ogy may help us to conceive how the records of events may be im­pressed as though on a sensitive film. The notions of time and space are curiously mixed up in these speculations about the fixed stars and the earth’s history, and past and future become but regions in an eternal present. And we can imagine our brains sending out ethereal waves as the sun sends out light to be spread abroad and recorded.

All this is connected with the doctrine of Karma, for it shows how our deeds and thoughts set in motion chains of causation that may influence all that lies around, till, like the ripples in a pool, they strike some distant limit and start on a return journey towards their original source. And truly what we call an act is but half an act — the first chapter in a history; the rest of the act is yet to come. The whole act is one and single, but its parts lie in different regions of time, and any period from a moment to an era may sunder the act from its conse­quence. At the present moment we are each of us traveling through regions of space-time filled with etheric vibrations which we left behind us on preceding trips, like comets encountering our own dust as we sweep once more over our orbit. One might multiply such images indefinitely; they enable one to understand Karma and they give to scientific romances a practical turn.

It sounds strange to hear that Aleppo is now a great railroad-building center, with vast quantities of railroad material, locomotive works, repair shops, barracks for the workmen, and hospitals for the sick. Yet such is the case, for that ancient city is now the principal base of operations in the building of the Bagdad railway. This line, when complete, will connect Konia, the terminus of the German Anatolian Railway, with Bagdad; and from Bagdad an English company will carry the line to the Persian gulf, this last section being under international management. The other sections are being built by German companies. Four sections are being built at once: from Konia
to Adana, thence to Aleppo, thence to Mosul, and from Mosul to Bagdad. Over the first three sections there is (as a writer in *The Scientific American* tells us), an army of 72,000 men at work. The material arrives at the ports of Alexandretta, Tripoli, and Mersina. An imposing station, costing over a million Turkish pounds, will soon be erected at Aleppo. With a bridge over the Bosporus, these ancient sites of Asia will be linked by rail to Europe. The lines running north to Damascus are being pushed farther north to join the Bagdad railway, and this branch is to be connected with Jerusalem. All this enterprise, together with the scheme for irrigating Mesopotamia, will work a wonderful change in the geography of those regions.

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*The* fiftieth anniversary of Queen Alexandra's coming to England has brought out a host of recollections of her beauty, her grace as a bride, and of the long record of unostentatious, womanly kindness which she has shown to all those of her English subjects who were most in need of it. Many of her errands of mercy were done in secret; many of her sympathetic and encouraging words were spoken and written to those whose situation in life was most humble and obscure. Queen Alexandra fulfilled all the duties of her high position with the same tact and graciousness.

A *Kentucky* woman, Miss Ellen Semple, has won world-wide recognition for her works on anthropo-geography, or the influence of geographical environment upon human beings. After many years of study and travel and work in preparing her books *American History and its Geographic Conditions* and *The Influence of Geographic Environment*, Miss Semple won fame as a lecturer on these subjects and she has within a year or two lectured in many great educational centers such as Oxford, and before the Royal Geographical Society. The study of habitat and its influence has been carried on by Miss Semple in a very thorough way. She takes motor trips, walking trips, slow railway journeys, and knows Korea, Manchuria, Japan, as well as Norway, Greece, and Switzerland. Her books are eagerly studied by teachers and are in the libraries of all American ships. They have the merit of excellent style as well as of intensely interesting matter.