THE THEOSOPHICAL PATH

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TIME and tale a long-past woe will heal,
And make a melody of grief. — *William Morris*
(*Earthly Paradise*, ii, 23.)

THE INFLUENCE OF MIND ON HEALTH:
by H. T. Edge, M. A.

THE subject here proposed is a large one. The influence of the mind is a much more important factor in disease and the cure of disease than it used to be, because we have grown more sensitive and finely organized and our ailments are more of the nervous kind. Consequently, in therapeutics more attention is given to the influence of the mind.

But before we can begin to discuss the subject profitably, it is essential to define our terms a little more accurately. The word "mind" is rather vague, as it stands in the above title, and needs closer definition. A little attention will show us that there are at least three factors concerned: the body; the mind, which is to be used as an agent; and the man himself, considered as a personality governed by will and motives. The man proposes to control and modify his thoughts and emotions in such a way that they will act beneficially on the body. For instance, he will (let us say) attempt to cure his indigestion by issuing to himself a command or strong wish that he shall not so suffer; and this strong wish may take the form of a mental assertion that he actually does not suffer but is in good health. This constitutes an attempt to use the power of suggestion. It is well known that such a power exists and can be used to produce desired results; so much is admitted by every physician; but there are varying degrees in which this belief is held. The most extreme of such views are those which hold that all ailments can be cured by

this method, without any other help. A more rational view holds that this method is only one of many, all of which contribute their share to the result, surgery, pharmacology, diet, regimen, sanitation, etc., being equally important.

The question of mental healing is at present in an exceedingly crude and experimental stage. Ordinary medicine is well organized and in the hands of a competent professional body with a vast accumulation of records and experience behind them. But mental therapeutics are the subject of indiscriminate experimentation by all and sundry. Hence it is important to observe the following point: that mental healing in itself, and mental healing as practised, are two entirely different things; and that it may be quite proper to extol the former while condemning the latter. It will be agreed that surgery and the prescribing of drugs, if left in the hands of quacks, ignorant persons, or the public generally, is a grave and dangerous abuse; but this is saying nothing against medicine itself.

Competence, therefore, is seen to be a matter of prime importance; and we may well begin by asking who is competent to practise mental healing. To this question we challenge anybody to give a satisfactory answer. The kind of psychology-knowledge needed for such a competence is nowhere to be found in public; but instead thereof, infinite speculation and contradictory views. Anybody whatever, with sufficient self-confidence, may and does set himself up as a reliable authority on the subject, sure of a plentiful audience among a public to whom the satisfaction of gullibility seems to be a necessity of their life. Any doctor who has experimented in hypnotism seems to be at liberty to publish his views broadcast without discrimination, and to advocate the virtues of his own performances. Any clergyman may do the same thing; and we have mental healers of various grades, ranging from literary and philosophical writers on "new thought" to old men with long hair and beards and a superficial resemblance to the reputed likeness of that great Healer whose powers they profess to have inherited.

In short, we are proclaiming no new or unpopular view when we declare that the whole subject of mental healing is a complete chaos; and that even though the art itself is or was of divine perfection, in its present condition it is bound to work probably far more harm than good.

The powers called into play in mental healing are more delicate

and important than those which ordinary medicine uses; and the risk and responsibility connected with them is correspondingly greater. Granted that the public in general, and unqualified persons in particular, are not to be trusted with the prescription of powerful drugs, or with doctoring themselves and others; we can but infer that the case is much stronger where psychological forces are concerned. Hypnotism, once loudly proclaimed as the coming power in medicine, has now dropped out of repute altogether; the warnings of competent advisers having proven true — that far more harm than good would result from dabbling in it. The same is undoubtedly true of mental healing; time and again we hear warnings and protests issued by physicians and others of the subtle dangers arising from this kind of psychology.

An illness is often the manifestation of an evil which is on its way out of the system, having been thrown off from the mind; in which case the attempt to stop it would resemble the stopping of a discharge, and the impurity would be thrown back. It might be thought that such an argument would apply to the case of medicine in general, and that consequently it is not right to cure disease by any method at all. But such is not the case, for there is a marked difference between ordinary medicine and mental healing. In the former we use physical forces, in the latter psychological. Consequently a different set of natural laws comes into play, and these have to be considered. It is one thing (1) to go to a doctor to cure a disease, and another thing (2) to invoke powerful internal forces, or (3) to pray to God for relief. In the first case, the doctor knows, more or less, what he is about; but in the second there is no doctor at all, and the healer (ourself or another) is in hopeless ignorance regarding the nature of the problems that confront him. If the appeal is to divine power, what answer could one reasonably expect to get, except that divine power knows its own business better than we do, and that what we desire is not always (or often) what is best for us?

But this article is not intended to be wholly condemnatory. The protesting against a misuse of mental healing is only one part of its purpose. For there is a sane and legitimate aspect of the question. To illustrate this, let us imagine two contrasted cases. A person has a diseased body and (1) he proposes to cure it by deliberately sitting down and desiring that it shall be cured; (2) he realizes that his bodily disease is the outcome of mental disease, and determines to

reform his mind and to bear the physical disease patiently, but with ordinary help from medicine and hygiene, until the evil force has exhausted itself, and his renewed mind has built up a new body. The latter is the right method, the former is the wrong.

Habitual indigestion may be the result of habitual carelessness in diet; in which case, ordinary mental healing would obviously be out of place; for, if successful (and any success could only be temporary), it would allow the patient to continue with his self-abuse. What he ought to do is clearly to reform his habits, by changing his mental attitude of weakness and sloth. The principle, so easily seen in this extreme case, is of general application, and should be applied in those subtler cases where we cannot so directly trace the cause of the complaint. The indigestion may be the result of some other bad habit or of a whole army of bad habits. In this case, the proper thing to do is to correct the habits; to attempt to stop the disease while continuing its evil causes would be to violate all rational principles of therapeutics. Still again, the chronic dyspepsia can be the result of bad mental and emotional habits, such as anxiety, fear, desire, or anger. Most probably it is the result of indulging two opposite and incompatible mental states at the same time; or, in other words, it is due to our nature being complex, as though we were compact of several distinct personalities, each striving to run the bodily machine to suit its own purposes, and the result being conflict. In this case, again, short of ordinary medical treatment and precautions, intended to assuage the immediate consequences and to help the patient to cure himself, deliberate mental healing would be out of place, and the proper course is to seek out the cause and remove it.

We have thus taken the one instance of indigestion, but only as a typical example. We cannot cover the whole field within any limits less than those of a large treatise. To understand the question, we must first study the relations between mind and body.

We cannot think even the slightest thought without producing a physiological effect. The body and mind react on each other; but the mind is the first sinner, the originator of the chain of cause and effect. The body is composed of little organisms, varying in size and complexity from the minute cell to the complex organ, which tend to repeat whatever impressions have been stamped upon them. Each of these little organisms has its own brain, and they are all creatures of habit. Hence the body may continue to run in a cycle of bad

health by its own momentum long after the original cause in the mind has ceased to act. And further, the body may influence the mind and give rise to strong thought. These facts have to be taken into account when we consider the question of cure. We must begin with the mind, since that is the prime mover and the stronger influence; but we must not neglect ordinary medical art and healthy rules of life. It is necessary to exercise patience, because the evil tendency set up may be deep-seated, the result of much time spent in creating it.

The next point to be considered is, What rules the mind? To answer this question requires considerable analysis. It will be found that most people who try mental healing propose to try to cure one part of the mind with another part of the mind. It is necessary to have a clearer idea of what the mind is. And here comes in the question of the dual nature of man.

It is not generally understood that *the dual nature of man, so much insisted on by Theosophy, is an absolute fact* that has its physical counterpart and that enters into every question of physiology and hygiene. Man is, in very truth, a Man within a man. There is always the perpetual struggle between the higher and the lower natures; and this goes on, not merely in the heart and in the mind, but in the body and every cell of the body. The result is want of harmony and co-ordination. In some natures the struggle is not intense, but in other natures it is more marked. People are born with unbalanced natures, and science says that this is due to heredity; but what are the causes behind heredity? A human Ego has, in the course of its lives on earth, accumulated a host of diverse tendencies, and the result is a highly complex nature; and it is not possible for all these conflicting tendencies to be harmoniously accommodated in one body. It might seem from this that we are preaching the doctrine that disease is inevitable; but we are merely showing that it is due to ignorance, and this means that it can be successfully combated by knowledge. The immediate point is that heredity is largely the name of an effect, so that to attribute disease to heredity is merely linking together two effects, while the cause of both is *thought* — the creative power in the material world. Our bodies are the result of thought, and we are truly what we think. This however needs qualification, for the time-factor enters into the question; it takes time for thoughts to produce their material effects. The consequence is that we are now that which we have made ourselves by our *past* thoughts,

and that our present thoughts will make our future bodies. It will be noticed how this touches upon the question of Karma. People are misfits because their desires are not constant and are conflicting. By the time their desires have brought about one set of conditions, the people are desiring something else. Also, people desire several different and incompatible things at the same time. The typical case of misfit is that of the man whose aspirations are impeded or thwarted by his temperament and physique; yet this temperament and physique is what he made for himself by his own desires at some time in the past history of the Soul. This may seem "unjust," perhaps you will say; but the question is, Is it a *fact?* We have to try to understand the actual laws of life and remember that they must necessarily be framed in accordance with a far larger scheme of equity than we can readily conceive. And it is an undoubted fact that, when we think, especially with the added force of desire, we set in motion powerful creative forces. We may have tried to satisfy our minds with belief in some arbitrary providence or some mysterious dispensation, or even with the impossible theory that all is governed by blind chance. But we shall sooner or later be forced to the conclusion that natural law rules everywhere, and that man himself is both the creator and the experiencer of consequences. It is only because we have taken too limited a view of the range and duration of the Soul's life that we have failed to perceive this fact of the working of the law of cause and effect. What a man sows, that shall he reap, but a long interval may separate the seed-sowing from the harvest. Could we but see with the eye of the Soul, our life would appear a consistent scheme, and its purposes would be revealed.

As far as medicine is concerned, our duty is to apply this wisdom to whatever circumstances lie within our reach. Our past deeds cannot be undone, but their consequences may be palliated, brought to an end, and prevented from reproducing themselves, just as a doctor may apply remedies to diseased tissue in order to remove it and prevent it from spreading or growing again. Let us suppose that a person has grown up with a constitution debilitated and disordered by nervous complaints. These, let us say, are due to his having been suffered to fall into deleterious habits in youth; and the fact of his having been so treated in his youth is again due to certain unwholesome desires that he indulged in a previous life, whereby he sowed a seed that grew up along with the growth of his present body. The

practical task before him is to mitigate and bring to as speedy an end as possible the consequences which he is now undergoing, and to take measures against the reproduction of similar conditions in the future.

Before the mind can cure the body, the mind must itself be whole; for a diseased mind cannot cure a diseased body any more than the blind can lead the blind. This is a very important point, and this alone suffices to explain why we cannot endorse indiscriminate attempts to practise mental healing. Oftener than not, in such attempts, the force employed to do the healing is the very force that is most destructive to man's welfare — the force of desire. And so, though the experimenter may get rid, for the time at least, of his particular complaint, he sows the seeds of future greater trouble. Another thing is this: that such an attempt to heal disease by calling in the aid of desire will probably act like a stimulant or a drug — that is, it will make drafts upon the stored up recuperative powers of the body, thus depleting them and leading eventually, as is the case with these powerful drugs, to a premature breakdown of the basic vital functions, such as the heart and the brain.

Still another argument against the indiscriminate practice of mental healing: it forms a branch of "psychism," which, as is generally admitted, is fraught with serious danger to the health and sanity of our race. To do anything which may arouse the subtler forces of the organism is a very dangerous undertaking; for before this can be done safely, it is always necessary that one should undergo tests and training calculated to establish his fitness for such a responsibility. Now the great majority of people in our civilization live very carelessly, judging by the standards that have to be considered in this case. A very large proportion are afflicted with neurotic ailments and weaknesses of various kinds; and of very few can it be said that they have their desires and impulses under control. The effect of arousing psychic forces must therefore be highly disastrous, for it increases the susceptibility without increasing the power of control. It is well known that Theosophy is strongly opposed to psychism in every form, because Theosophists recognize that psychism is a great danger to humanity; so it will not be found surprising that we issue these warnings against indiscriminate experimentation in mental healing.

The desire to be merely physically well is, in fact, not the motive

that should or can be rightly appealed to. As said, such a desire could but result in a pampering of the body, thereby rendering it a greater foe to the true well-being of the man. What then, is the power to which we should appeal?

It is the *power of right motive,* the aspiration to realize the true meaning of our life and to live in it, rather than in our personal desires and pleasures. The satisfaction of personal desires not being the true purpose of human life, the attempt to achieve such satisfaction results in disappointment. If these principles be considered too lofty and difficult for the ordinary man to follow, then let the ordinary man give up the idea of mental healing. No one is bound to study the deeper laws of nature, but those who do embark on this study must be willing to observe the necessary conditions. It is the attempt to combine occultism with a life of sensual satisfaction or worldly ambition that results in disaster.

If we could only view the question of illness from the viewpoint of the Soul, we might see that a particular disease is actually a necessary part of the experience through which we are going. "It is the will of God," says the voice of pious resignation; but it would be helpful to be able to understand the "will of God" better. We now prevent or cure diseases that once were considered the will of God, because we know they are due to dirt or some other avoidable cause. A little deeper insight might enable us to perceive the cause of other ailments; and not merely the physical cause but the moral necessity. Even if we could trace cancer to its physical cause, we should still feel in want of an explanation of why a particular person should be called on to undergo that particular suffering.

It must be said that we cannot understand fully the meaning of pain and disease unless we recognize the truth of reincarnation. Any notion of human life which does not include this truth is a wrong notion, and therefore many of the problems of life will remain inexplicable to the person holding such a notion. Yet one almost dreads to use the word "reincarnation," because it is so apt to bring up erroneous ideas in the mind of those who are not familiar with this truth. It would be better to say that the man who wishes to understand the problems of life must accustom himself to thinking about the life of the Soul, and not merely about the life of a single one of the Soul's successive bodily tenements. Thus viewed, our present life appears as a part of a whole; and so it is incomplete in itself and cannot be

considered separately. We entered life with a certain heredity, and that heredity was predetermined by the affinities and predilections which we had engendered during previous lives. Were this not true, life would be unjust, and a mere farce without rhyme or reason. The seeds of a disease may have been sown in the present life or in one or more previous lives. The fact that the parents transmitted them does not affect the point at all, any more than does the fact that a microbe transmitted them. For the point is — *why* or on what principle of logic or justice did *we* receive *this* heredity or incur *these* liabilities? The relation between one life and the next is quite similar to that between one day and the next; and we know that our behavior today may influence most painfully our experiences on the morrow. If a day of debauchery brings a following day of illness, why may not a lifetime of dissipation and self-indulgence bring after it a lifetime of impaired health? — or worse!

To ascertain fully the rationale of any particular case of disease — say cancer — how thoroughly would it not be necessary to plumb the inmost secrets of the patient's daily life from the cradle up? And what doctor or confessor can do this? Who could say to what habitual self-neglect or self-indulgence, committed perhaps in total guilelessness, the actual cause might be traceable? Four meals a day, perhaps, with light refreshments in between; and many other things that would only be in place in a medical journal. And when we pass to mental causes, what about habitual worrying, habitual fits of temper, inordinate vanity, green jealousy, overpowering desire, and the like? All these are diseases of the mind or psychic nature, and must inevitably react on the body — perhaps long after the original cause has ceased to operate.

To cure a disease may be part of a process of general healing of the whole nature. If it is only a passing complaint, like a cold or a fever, or a mechanical injury, ordinary treatment may suffice. But we speak particularly now of those chronic complaints which are the very ones that most interest mental healers. Indigestion in its innumerable forms and remoter consequences covers a large field, and the phrase "nervous complaints" fills out another large area. Perhaps nothing is more influenced by the mind than are the processes of assimilation. If there were not a living, vitalizing soul within the body, no assimilation whatever could take place; what *is* assimilated depends on the nature of the living soul within the body.

These remarks may perhaps seem somewhat discursive, yet they are all directed to one chief point — namely that the deliberate attempt to cure one's illnesses or those of other people by a mental process is not likely to conduce to beneficial results and is not to be recommended. And the reason, as aforesaid, is that our minds need healing first — in fact our whole nature needs rectifying. In making such an attempt we are experimenting rashly, poking heedlessly into the unknown, endeavoring to bring about results which we think desirable, but which are probably not desirable. It might be objected at this point that the above reasoning applies to the physician's art in general, and that *all* remedial attempts are wrong and should be discouraged. But to argue thus would be to overlook the distinction between ordinary therapeutics and mental healing, which is a real and vital distinction. In the latter we enter into the domain of unknown psychic forces, and encounter therein new conditions; so that the same rules cannot apply to both cases. Ordinary medical science is a fairly well understood and carefully worked-out system, the fruit of much study and experience; but mental science is an unknown land. As regards the latter, we are in the stage of quackery and empiricism. Everybody thinks himself qualified, no matter how ignorant. Fancy such a state of affairs as existing in the domain of ordinary medicine! The public prosecutor would have to be busy. And in the case of mental healing the seriousness of the situation is not less but far greater. It will be understood, then, that we are saying nothing whatever against mental healing itself, but a great deal against the indiscriminate practice thereof; and who can deny that we have ample justification? But who is to examine and grant certificates for mental healing? Echo answers, Who?

It is worth while here to call attention to the fact that hypnotism, once hailed so enthusiastically as the coming savior in therapeutics, has now been found to be unreliable. The dangers pointed out by those who understood its real nature have proven themselves well-founded. Undoubtedly much harm is being done all the time by psychism and mental healing; such is the opinion of people qualified to speak — physicians and others who contact the intimacies of people's lives.

But this article must not be all of a warning and negative nature; let us turn to the brighter side again. What should be the conduct of one who is sincerely striving to live the true life? To intrust his

health to the care of a physician, to observe the ordinary and well-known rules of hygiene, and to leave the rest to the great Law that adjusts all human affairs with equity. Many such sincere workers in the great cause are afflicted with more or less uncomfortable and inadequate physical outfits — the result (as they know) of their own past building, in this life and in previous lives. Perhaps they had reached a mature age before they began to think seriously about life; and so, when they did begin to think seriously, they reversed the currents, so to say, and their old body forthwith became a misfit. What they have to do is to build a new and better body within the old, and keep up the process until the new is strong enough to drive out the old. The chief difficulty arises from the fact that the body reacts powerfully on the mind. While the mind is always the first sinner, the originator of the chain of action and reaction, yet the body is a creature of habit and tends always to repeat whatever lesson it may have been taught. The body is a collection of animals, each with its own little brain, each able to do one thing; and the tendency is for every cell, every group of cells, and every organ, to keep on doing what it has been accustomed to do. The result is the co-existence within us of a contrary will — or, rather, of a host of contrary wills, as St. Paul and others have so feelingly complained.*

The only way to stop this is to starve the old cells by refusing them their sustenance of thought; and then the process must eventually die out, however long it may take. And we should always remember that patience itself is one of the virtues; so that, in exercising it, we have thereby already attained part of our object. And time fights on our side. If it took time to build the bad habit, it will take time to unbuild it, but not so much time.

The question of food is one of the most important in the whole business and one most fruitful in instructive object-lessons for the wise physician. A certain part of the food goes to keep us alive, as is shown by the fact that, if we abstain altogether, we die. But the greater part subserves other purposes. Our body is, as said, a host of little animals; and in most of us this menagerie is unruly. When we eat we are actually feeding a whole zoological garden. A great deal of the nutriment is absorbed almost immediately from the stom-

* "We know that the law is spiritual: but I am carnal, sold under sin. For that which I do I know not: for not what I would, that do I practise; but what I hate, that I do."
— *Romans*, vii, 14, 15.

ach, and goes to create a feeling of "well-being;" hence hot and spicy foods and warm and stimulating drinks are so desired. There is more *nutriment* in plain food; but if we eat that, we do not immediately feel fed. We therefore take it with sugar or jam. Much of our feeding is, in short, a mere feeding of the little elemental selves that compose our recalcitrant lower nature.

Special diet alone, it will be inferred, may fail to achieve the desired result. It is *not what we eat,* but *what we absorb,* that feeds us. Yet dieting may be a valuable or even indispensable aid. But here again it is evident that our own morbid preoccupation with our ailments and their treatment may counteract any good effect, so that we become valetudinarians and faddists; which is an argument for submitting to the prescriptions of a competent adviser.

In conclusion something should be said about the bringing up of the young. A good deal of attention is paid nowadays to eugenics and prenatal influence, but it is overdone. So much of the subsequent results are due to what happens during the first year of life, that prenatal influences sink into comparative unimportance. At least we have to attend to the latter thing first, and then we may be free to deal successfully with the former. The bringing up of the young under the Râja-Yoga system is in accordance with sane views as to the composite nature of a human being; and thus many ailments are effectually checked at their outset. If the child can grow up without these failings, how much is thereby saved! While people are cudgeling their brains to find a way of suppressing tendencies which never ought to be there at all, the Râja-Yoga system secures the harmonious growth of the child from the outset, so that the problem does not arise. Tendencies supposed to be inevitable and even normal to the healthy human being are in reality abnormal; and when people say "You cannot alter human nature," the answer is, "But what *is* human nature?" Ordinary upbringing of children permits the growth of a secondary and intrusive nature within the individual — something parasitic, in fact; and this is what causes the trouble. This secondary nature is fed on self-will, vanity, indulgence, and other such weaknesses which parents permit and even promote. A certain genius whose career was ruined by his own actions is said to have been treated by his mother in early years as a girl, because she was disappointed at his being a boy. This is an extreme case, but is it not true that fond parents do create in their vain imagina-

tions an artificial dress which they force the budding soul to assume? Do they not deck us out in mental ribbons and try to make us fill the rôle of little gods on tin wheels? All this means the production of a dual personality; and the catastrophe arrives when the harvesting time comes on. Clearly there will always be plenty of disease as long as people go about with these dual natures, and half the cells in their body pulling one way, and half the other.

Enough has been said to indicate the scope of this subject and to interest any physician who is not already interested in it. Further advance in general knowledge on the subject is hindered by lack of progress in other directions; but it is evident that the true Theosophical life clears the way to a limitless vista of wisdom in the laws of health, mental, moral, and physical.

THE ACROPOLIS OF ATHENS: by F. S. Darrow, A. M., PH. D.

"Oh thou, our Athens, violet-wreathed, brilliant, most enviable city!"

I. The Period Preceding the Persian Wars *(concluded)*

(e) The Pelasgicon

THE picture of the early Acropolis, treated in a previous article, would be incomplete without a glance at the western approach which has always been the natural means of access to the summit. From earliest times the gradual slope of this end of the hill was fortified, at first by defenses at the top and an encircling wall below. At different periods these walls were multiplied at various levels, while the terraces were strengthened by nine gates and the whole was known as the Pelasgicon. The repeated destruction of these walls makes it difficult to follow their direction, though fragments at different points still remain to testify to different building periods. The later Propylaea, the magnificent gateway at the top of the slope, was never in any sense a fortification.

(f) The Early Parthenon

The rule of Peisistratus at Athens (560-527) marks an important epoch in the development of the city's greatness. Although the tyranny impeded the political progress promised by the wise constitutional

reforms of Solon, the tyrant was a man of wide interests, keen in his desire to increase Athens' greatness, and active in fostering art and literature. The splendor and culture of his court did much to raise what had previously been but a provincial town into cosmopolitan pre-eminence. Of his sons, Hipparchus was more nearly akin to his father in tastes and aims; but the other son, Hippias, who after his brother's murder became sole tyrant, lost sight of much of the broader interests of his father and soon degenerated into a typical representative of what the modern word "tyrant" implies. The year 510 B. C. in which the expulsion of Hippias, the last of the Peisistratids at Athens, took place, marked a new period in Athenian history, the re-establishment of the democracy under the guiding hand of the third of the famous lawgivers of Athens, Cleisthenes. The constitution of Solon, with further and more democratic reforms, was again restored, and hand in hand with the reanimated political life a new period of architectural activity was inaugurated upon the Acropolis. This activity, although very probably beginning under Cleisthenes, must have been carried forward by Themistocles, who was the chief statesman at Athens in the years just preceding the Persian Wars. Even the remodeled Old Athena Temple with its new colonnade and entablature failed to satisfy the demands of the citizens, who in the pride of their newly regained independence began a second temple of grander proportions. Proof of this has been disclosed by the excavations around the foundations of the Parthenon, which have revealed a substructure extending beyond the dimensions of the present building to the south. Also, some column drums have been discovered which cannot have belonged to the Old Athena Temple.

Formerly it was believed that this temple was begun about 465 B. C. when Cimon, the son of Miltiades, was at the head of the Athenian state; but traces of burning upon the drums and foundation indicate a pre-Persian date, i. e. earlier than the destruction of Athens by the Persians in the year 480-479 B. C. This early building, however, apparently was never finished and by 480 had reached only a height of two or three drums. Therefore presumably it was not begun until several years after the expulsion of Hippias, or if begun before 500 the progress of the work must have been interrupted by the Ionian Revolt (500-493 B. C.) in which the Athenians by aiding their Asiatic kinsmen drew upon themselves the anger of Darius, King of Persia, thereby causing the Persian Wars (492-479 B. C.).

The multiplication of cults upon the limited area of the Acropolis proved a source of considerable trouble to the architects of later times. A precinct once dedicated to a particular god or goddess could not be encroached upon by any new building projects. Consequently, when this new temple of large dimensions was projected it was necessary to build a colossal terrace of masonry and thus level the uneven surface of the rock to the south, and so avoid encroaching upon the ground already sanctified by the Old Temple precinct. This mass of masonry, which is of poros, differs greatly in depth in different parts; at the south some 18 or 20 courses rise to a height of over 30 feet, while the east corner of the foundation rests upon solid rock. The column drums of marble show incomplete workmanship, and no architectural fragments have been found, which facts would lend force to the theory that the early building was never completed. The plan of this temple was probably an exact reproduction of the cella of the old Hecatompedon, the official designation of the Old Athena Temple.

The victories of Salamis and Plataea raised Themistocles, the moving spirit in the Greek opposition against the Persian attacks, to a pre-eminent place at Athens. The city walls, destroyed by the army of Mardonius, had to be rebuilt, and the sanctuaries on the Acropolis which had been reduced to a mass of ruins were probably at once temporarily restored by Themistocles, after his unsuccessful attempt to persuade his countrymen to rebuild the city on the coast at the Piraeus. But the proof of the treachery of Pausanias, the Spartan victor of Plataea, and the suspicion that Themistocles was his confederate, led to the ostracism or political exile of the great Athenian in 471 B. C. In the next ten years Cimon, son of the victor of Marathon, became the leading statesman at Athens. His character was so open-hearted and charitable that he freely gave his riches to assist the poor and to aid in the erection of magnificent public monuments and in beautifying the parks and gymnasia in and about his native city. But in 461 his friendship for Sparta caused the Athenians to vote him also an exile. The ostracism of Cimon marks the beginning of the Periclean Age, which properly speaking extends throughout the generation marked by the years 460-430 B. C., although Pericles' influence did not become supreme until about 445 B. C. It was the three statesmen: Themistocles, Cimon, and Pericles, who carried forward the work of development which resulted in making the Acropolis of Athens the art center of the world.

II. The Periclean Age

Never within recorded history has the Golden Age of Athens been equaled. Pericles' authority did not rest upon any public office with which he was invested, but, as Plutarch says, he ruled by the art of persuasion and his throne was the platform. Although Pericles adorned all Attica with monuments of beauty, it was on the Acropolis that the most noteworthy of the Periclean buildings were built. In the words of Plutarch: "As the buildings rose, stately in size and unsurpassed in form and grace, the workmen vied with each other that the quality of their work might be enhanced by its artistic beauty. Most wonderful of all was the rapidity of construction. Pheidias managed everything, and was Pericles' overseer in all the work."

(a) The Periclean Parthenon

It is said that Pericles in building the later Parthenon, was carrying out a promise made to Athena to rebuild her sanctuary burned by the Persians — presumably the partially finished older Parthenon. At the time this building was planned, two temples were projected, one to Athena the Virgin, to replace the Old Parthenon, and a second, the present Erechtheum, to replace the Old Athena Temple by housing the cults of Erechtheus and Athena Polias, and to cover the site of the old Cecropia. At this time it was determined that all the new buildings should be built of marble, so that all inferior stone was removed from prominent positions and used to strengthen walls, or for other inconspicuous purposes. Several column drums of earlier buildings destroyed during the sacking of the city were carefully placed in position in the newly built Acropolis walls, where they can still be seen. The foundation of the new building is not as long as the older one; it lies a little more to the north, while the division of the interior was altered to accommodate the colossal statue of Athena which stood in the eastern cella.

All attempts to describe the wonderful harmony of this most perfect monument of ancient art are as futile as an analysis of the impression made by the performance of a musical symphony; indeed, the faultless rhythm of line and perfect proportion of this building carried out in perfect technique, may be fittingly compared to a musical masterpiece. The underlying theme, which is developed about the life of Athena depicted upon frieze and pediment and which culminated in the colossal statue of the goddess herself, visualized to

the Greek all that was highest and noblest in their civic life, while behind these conceptions lay the deeper symbolism which the goddess with her creative and protective genius represented.

The custom of visualizing abstract ideas and conceptions of divinity was dear to the Greek artist and appealed to the imaginative tendencies of the people. In its purity Greek religion did *not* encourage the worship of statues, a bald statement too often made in textbooks today, which is no more true than that the American nation worship the statue of liberty in New York harbor. It is true, doubtless, that the higher symbolism which the statues represented was later lost or buried in ignorant superstition, and that the masses came in time to connect their conceptions of divinity with the statues themselves, in a manner similar to that with which people may venerate, and even kiss, the toes of the statues of the saints.

No greater proof of the purity and high aspiration of the Greek religion at its best could be demanded than the unity of purpose, harmony of conception, and grandeur of accomplishment, exemplified in this temple. Further, there must have been an ideal co-operation existent amongst the workmen themselves toward the fulfilment of this work, a unity of effort which savors of the highest competition to excel in accuracy, united with a love of the work. It would be difficult to imagine these creators of a national monument shirking work or responsibility, and we can be sure that the ruined temple today, like many another ancient monument, represents the height of development and ideal which made that nation great.

The Parthenon stands alone amongst Greek temples in that delicacy and finish which distinguish it from the heaviness of other ruins, as, for example, the so-called "Theseum," which is well preserved, within a stone's throw of the Acropolis. A dissection of its construction is a great help towards the further appreciation of the building, in the same way that the study of technique and theory aid the mind in an intelligent study of a symphony. The Parthenon also excelled all other buildings of ancient Athens in the brilliancy of its polychromy and plastic embellishment.

Structure of the Parthenon

The architects of the Periclean Parthenon were Ictinus and Callicrates. As we know that the statue of Athena was dedicated during the Panathenaic festival in 438 B. C., it is reasonable to suppose that

the building was completed at that date; 447 B. C. is the probable date of the beginning of the work. Except for the hard limestone steps and the roof tiles of Parian marble, the temple was built of Pentelic marble, 228 feet long by 101 feet in breadth. The extensive flooring though apparently level, rises in the center and slopes gradually towards the sides. The side lines rise 4½ inches in the center, while those of the ends are 2½ inches higher in the middle than at the ends. This rise in the horizontal courses is characteristic throughout the structure. The entablature of the front and back of the building measures 2 inches higher in the middle, and that of the sides 3½ inches. Many theories have been expounded to explain this feature, one being that the eye demands a strong center, for in a structure of such massive dimensions the straight surfaces would apparently sink in the middle; but the more probable purpose was purely aesthetic, as in the curvature of the columns (entasis) to tone down the severe effect of the straight lines. It is certain that this refinement was one of the subtile means employed by these master architects towards obtaining that graceful elasticity of line which is so apparent in this temple. These modifications certainly required the most perfect mathematical calculations and great skill in execution.

Naturally, the uneven flooring presented difficulties at once when it came to placing the massive columns. This problem was overcome by varying the height of the lower sections, or drums, of the columns from 3 to 17 millimeters. The encircling colonnade of the temple presents 17 columns upon the sides and 8 on each end, counting the end columns twice. They are 6 ft. 3 in. in diameter and 34 ft. 3 in. in height, and built up in most cases of 12 sections, including the capitals, so carefully jointed together that the stones seem grown together. It has occurred in chipping near a joint that both sides have broken off together as if of one stone. The articulating surfaces of the drums, with the exception of the top ones which support the horizontal entablature, are somewhat concave so that only about nine inches of the drums are in actual contact, around the circumference. The edges of the lowest drums are raised slightly to prevent uneven contact, and it is possible to slip a piece of paper under these first drums for a short distance. Holes were drilled in the center of the drums to admit of wooden pegs (dowels) which helped to keep the different courses in position. As the courses were built up the uppermost drums were turned and ground upon the lower ones until the joint

was almost invisible. In some cases this work was so perfect that the wood of the dowels has been preserved in the airtight cavity. Unfortunately, earthquake shocks and explosions have shifted many of these joints.

The uprights of the columns show a bulging toward the middle (entasis) and taper towards the top, so that the greatest diameter of the column occurs somewhat below the middle of the shaft. The twenty grooves or channels were started upon the top and bottom drums before erection but the rest of the drilling was finished, from below upwards, after the columns were in place. These channels diminish in width but not in depth as they approach the top, a fact which deepens the shadows and softens the lines as they ascend. The sharp lines which divide the channels (arrises) although today they are badly damaged in many cases, originally must have shown beautiful workmanship.

The capitals, which consist of a square plinth (abacus) on top of a circular cushion (echinus) were carved from one stone, a fact which made them more secure; the transition between the capital and upper drum of the column is marked by four rings (annuli) cut in the marble and were painted, thus converting what might have been a blemish into an ornament. The oval molding, or surface of the echinus, was probably painted with a wreath of leaves. The square plinth supported the cross blocks of the entablature, which show the most exquisite joints in the building. All the columns lean slightly inward, while those at the corners lean toward the center also, to avoid the slight tendency to diverge at the top, fanlike, the natural consequence of the sloping flooring. These corner columns also are one and one quarter inches larger in diameter, which fact ensures an appearance of strength and solidarity to the whole.

The entablature consists, first, of three blocks of marble, placed edgewise, one behind the other across the columns, with their vertical edges a little wider at the bottom than at the top. Above this is the characteristic Doric triglyph and metope frieze, which in this case is finished both inside and outside, as it is visible under the colonnade. It is thought that this frieze construction is probably an imitation in stone of the ends of beams and spaces of earlier wood construction. In early temples the spaces between the triple beams or triglyphs were sometimes left open, but later it became customary to fill the intervals with slabs, either plain or sculptured, which were slipped

into place by grooves. In the Parthenon, the ninety-two spaces were filled with sculptured slabs or metopes, worked in very high relief. It is customary to disparage the workmanship of these slabs, which show more faulty design, and less delicacy of finish than other parts of the building. Possibly some allowance should be made for their position and use as an architectural finish rather than as separate artistic units. The subjects treated on the different sides of the building in these metopes were the conflicts of the Gods and Giants, Athenians and Amazons, the Lapithae and Centaurs, and possibly the siege of Troy, but the last is uncertain because of the fragmentary condition of the slabs preserved. The whole theme was the triumph of civilization over barbarism. The background of these metopes was red, while no doubt the figures were colored.

The problem of fitting the triglyph frieze to the columns was a difficult one, as the Greeks were not satisfied to have half a metope at the corners of the building. Many devices were resorted to in early buildings; that used in the Parthenon was the alteration of the axial distance of the corner columns by diminishing the distance from eight feet two inches to seven feet four inches, with a result restful and pleasing to the eye. The grooves of the triglyphs were painted a deep blue, in fact the color scheme of the entablature apparently was one of alternation in red and blue, with occasional green, while clear white and gold were supplementary.

The overhanging cornices present lower surfaces cut in shallow rectangular slabs (mutules) which were red, against a blue ground with drops (guttae), imitation perhaps of nail heads, which were gilded. Painted borders increased the elaboration of this handsome entablature, that crowned the simple columns, which may have been painted yellow, though this is uncertain.

The walls of the cella, or temple proper, taper slightly as they ascend and were built of oblong plinths of marble (header and stretcher construction), the separate courses being bound together by clamps of welded iron fastened in place securely with melted lead; the edges were carefully beveled and the surfaces beautifully finished. The separate courses were leveled with great care; a straight-edge smeared with red earth and oil was used for the purpose, and the process was continued until the whole surface was covered with the pigment, traces of which have been observed. The side walls of the cella projected at front and back, forming vestibules finished with six columns to sup-

port the ceilings. The front vestibule (Pronaos) made a convenient shelter for receiving votive offerings.

Encircling the cella walls, under the colonnade, at a height of 39 ft. above the stylobate or floor of the colonnade, was a continuous frieze of sculptured slabs, forming the masterpiece of bas-relief representing the Panathenaic procession. This wonderful piece of work was 524 ft. long and 3 ft. 3½ in. in height, the portion preserved showing 350 human figures. Here again we see that the technique was governed by a master-hand, for though the figures were carved in very low relief, they show several planes from one and a half to two and a quarter inches high, and the design is carved deeper at the top to counteract the slope of the wall and increase the effect of light and shade in the subdued light, for the frieze was only visible when standing under the colonnade or upon the steps of the temple. The whole effect was heightened by color and by the addition of metal details such as reins, staffs, and regalia carried by the figures, which were probably gilded.

A few slabs of this frieze still remain upon the building, twenty-two slabs are preserved in the Acropolis museum, while the majority are in the British museum. The difficulties, presented by the immense subject of the Panathenaic procession which took place at the annual religious festival, are ideally treated. The portion of the procession on each side of the building, while a natural continuation of the whole, forms a complete picture by itself. The energetic action is arrested at intervals by standing figures which have been termed "punctuation points," and these effectively serve to keep the subject within bounds. The action increases constantly from the ends to the center, when it again slackens towards the opposite ends, like the crescendo and diminuendo of a cadence in music.

The groups of figures start from the western end of the temple, that first seen upon approaching the building from the entrance of the Acropolis, where horsemen are preparing to mount, and as the procession advances the column divides upon the two sides of the building to meet again at the east, where the seated deities await the approach of the procession with the yearly dedicatory offering of a richly embroidered robe of saffron color. This robe, which was used to protect the ancient image or xoanon of Athena Polias, was the work of the chosen maidens of Athens, and the embroidery depicted the battle of the Gods and Giants.

The procession is headed on the north by a group of elderly men followed by matrons, and maidens carrying baskets, censers, libation vases, and other insignia. The sacrificial oxen and sheep led by young men are followed by men bearing water vessels, trays, and other objects. Next come the flute and lyre players followed by bearded men and armed youths, while the main portion of the side walls depict a company of youths on horseback. The grouping upon the north and south walls correspond in main features though the details are very different, the artist's idea being, presumably, to convey the idea of a single column, which again shows a unity of conception in the plan of decoration. Monotony of lines is avoided by variety in drapery and by clever transitions in the position of the figures. The small size of the horses has raised the question whether a special breed was used in those days. It is more probable that the archaic law of isocephalism was not entirely departed from, wherein the heads of men and animals were represented practically on a level whether sitting or standing — a means dear to the early artists to avoid gaps in the design. In the case of this frieze, however, the lack of proportion is not noticeable until attention is drawn to it.

Above the horizontal entablature, at the east and west ends of the temple, were the triangular pediments, 96½ ft. long and 11½ ft. high in the center, with a depth of nearly 3 ft. from the enclosing cornices. These spaces were filled with scenes sculptured in marble; some portions of the figures have been preserved — and they are the most perfect sculptures we possess. The eastern group, as we are told by Pausanias, represented the birth of Athena, as she issued fully armed from the forehead of Zeus, while the western group represented the contest between Athena and Poseidon for the possession of Attica. It is impossible to overestimate the beauty of these superb sculptures, for when taken individually or collectively they embody all that is admirable in the Greek ideals of physical beauty. They show a breadth of conception and grandeur of proportion executed with an unrivaled delicacy of finish, and this proves a wholesome religious conception of the ideal man, far different from the emaciation and mortification of the flesh which permeated the art, for example, of the Middle Ages. There is still much controversy regarding the position and identity of the figures. We may be very sure that the central figures of the deities, of which we have little knowledge, early attracted the attention of fanatical marauders,

who destroyed them, so that the figures we treasure are those of lesser importance in the groups. We know of the deplorable attempt made by Morosini, in 1687, to carry away the figure of Poseidon and the horses from the chariot of Athena, which stood in the eastern pediment, when, through the carelessness of the workmen employed, they were allowed to fall and were broken in fragments.

In the eastern pediment group, Zeus was probably the central seated figure, with Athena rising fully armed from his forehead, after the blow which her brother Hephaestus has just smitten with an ax, while Nike steps forward to crown the goddess, and Iris starts outward to proclaim the news. The reclining figures, cleverly designed to look natural in the diminishing spaces of the pediment, are most probably figures of Olympic divinities interested in the spectacle, though here there is the most difficulty of identification. The so-called "Theseus" and the "Three Fates" are the best preserved of these superb figures. The chariot of Helios rises from the waves in one corner as Selene disappears in hers at the opposite end. The horse heads are masterpieces.

It is thought that the olive tree figured in the center of the western group, with the god and goddess on each side, though just what moment in the contest was represented is conjectural. Horses and chariots with attendant charioteers probably stood on each side, with supplementary figures beyond, whose identity has been suggested as that of Cecrops and his daughters and his son Erysichthon, with Erechtheus and his family on the opposite side, besides other figures, only fragments of which are preserved.

Although the decoration of the temple was elaborate, the building was of such massive proportions that the effect of the decorations collectively was subordinate, for the embellishments were governed by that balance and refinement characteristic of the order of the whole plan. The sculptured themes upon the building have been likened to the parts of a Greek drama. The first act could be compared to the eastern pediment; the theme of the metopes — that of the powers of light over the powers of darkness — might compare with the chorus; while the second act is seen in the western pediment — the contest for supremacy in Attica. The frieze, with its joyous anthem of gratitude for peace and plenty, is like a song at the end of the play.

Greek temples, with few exceptions, were oriented towards the east, and were probably lighted only from the eastern entrance, though

there is a possibility that a clerestory, or raised portion of the roof perforated with openings, may sometimes have been built to let in light. It is thought that the roof of the Parthenon was composed of tiles of Parian marble which were somewhat transparent; from literary references to the temple it is fairly certain that the light was subdued within the sanctuary except when the doors were opened to admit the rays of the rising sun which threw the colossal figure of Athena into relief against the dark red walls. The eastern chamber was nearly one hundred feet long and sixty-three feet wide, and was divided by two rows of columns, which formed side aisles. Traces of these columns can be found upon the worn pavement, and are of such small diameter that in all likelihood there were two stories of columns, one upon the other, crossed through the middle by a horizontal entablature, such as was customary in many temples.

Near the center of the flooring can be seen a large rectangle of poros stone, which is the almost certain position occupied by the statue of Athena. Numerous dowel holes in the stone around this square of softer stone probably show where the slabs of marble which formed the pedestal were fastened. This space is approximately 12 ft. wide and 24 ft. long. The statue is reported to have been 26 ells high — about 39 ft. — thus it is seen that this basis is none too large. Pausanias describes the statue of the goddess "as formed from ivory and gold, with an image of a sphinx placed on the cone of her helmet. On each side of her helmet, too, there are griffins. The statue is erect, with a garment reaching to her feet. There is a head of Medusa fashioned from ivory on her breast, and a Victory of about four cubits supported by her right hand. In her left hand she holds a spear, while a shield lies at her feet, and near her spear there is a dragon, which may perhaps be Erichthonius. At the base of the statue is depicted the birth of Pandora." The small statuette illustrated, unearthed when the foundations for the high school were being excavated in Athens, seems to follow the description very closely, though the distorted proportions, small size, and crude workmanship, give a very inadequate idea of what the statue was like. This statuette is preserved in the Athens museum and is known as the Varvakeion copy of the Athena Parthenos.

In all chryselephantine statues, the inner kernel consisted of a scaffolding of wood, which was covered with some plastic material, upon which the precious material was fastened. The nude portions

of the statue were of ivory and the garments and accessories were of gold. The value of the gold used in this statue has been estimated at $750,000. There are surprisingly few references to this statue in classic literature, although it probably existed for about eight centuries.

Behind the main sanctuary was a smaller room separated by a partition which was known as the Parthenon proper. It was 44 ft. in length and probably served as a treasury. Its stone coffered ceiling was supported by four Ionic columns.

There is no direct statement in the ancient authors to the effect that Pheidias made any of the Parthenon sculptures except the cult image, and it would have been a physical impossibility for one man to have chiseled the two pediment groups, the 92 metopes, and the 524 ft. of the frieze, besides the other works attributed to him. Therefore at most Pheidias can only have furnished the drawings for these last, and we must not forget that even to associate him so closely with the architectural sculptures is conjectural. Despite these facts, however, it is certain that he represents the culmination of Greek art, and so do they. He was at the height of his career during the Periclean Age, and was the general artistic supervisor of the works of art of that age. No one can deny that the pediment statues are the greatest extant sculptures, and they are living, breathing Greek originals — not cold and lifeless Roman copies. In fact today we can echo the words of Plutarch, who in the first century, writing his appreciation of the works of Pericles, says: "There blooms upon them a certain freshness untouched by time, as if there dwelt within them an ever-animating spirit, a life that never grows old." *(Life of Pericles,* XIII).

A SWEDISH writer on meteorology explains the cloudless hot summers of 1901 and 1914 there, by an anticyclonic air circulation around the country, at some distance above the earth, while the natural cyclone (due to the earth's rotation) of the lower air throws it outward, preventing the heated air towards the center from rising. The action can be illustrated by slowly rotating a glass-walled vessel containing colored fresh water superposed on a salt water layer, while the surface is blown down on with a pair of bellows. D.

CONTEMPORARY MUSIC: by E. A. Neresheimer

II

The New French School of Music

FRANCE has more than once surprised the world with epoch-making changes which favorably affected the welfare of humanity; and there now emerges from that gifted country a new school of music which is more universal than national. A new interpretative value is given to the musical estate; it is masterly in its originality, substance, and ideas, inasmuch as its chief characteristic is a subtle mysticism which touches the borderland of spiritual consciousness in no uncertain terms; it is commanding in its message and entirely independent of the emotional forms of that other school of modern music that still revels in the passional conflict, sex-influence, and in overstrained illustration in contrapuntal devices.

Achille Claude Debussy, born in St. Germain, 1862, may be said to be the most consistent exponent of the characteristic trend of this new school. There are in France a host of followers, all of whom achieve the singularity of their effects by the same typical design. The departure is so radical, so independent, and so well fitting the rising wave of spirituality, that we wonder — in the absence of special musical antecedents in France that could have led up to such a remarkable demonstration — whether this is not the visible effect of the culmination and synthesis of the latent mysticism long dormant in the French nation.

It is claimed that the technical structure of this new school is tending towards a simplification by the use chiefly of the diatonic scale. But this is not borne out by the works themselves. While they are not so profusely chromatic and polyphonous nor so voluble of orchestration as the compositions of the latest German School headed by Richard Strauss, Schönberg, etc., they are by no means simple.

The most important and far-reaching change made by the French is of course in the music-drama; herein the departure is the most radical, consequently, perhaps, the most important. It amounts to a complete overthrow of traditional operatic notions. Melody, in the form to which we are accustomed to hear it, is practically absent in the parts given to the voices. Whatever melodic substance is made

use of is for the purpose of thematic illustration of the drama and placed in the orchestra.

It is held that thought, action, and emotion of the characters in the drama are too fluidic and too rapid in mental concepts to admit of such inevitable retardation as is experienced by the necessary slow movements of melodic contours. This is perfectly true; ordinary speech of the characters is not amenable to the confines of melodious declamation. It will be of interest to note the composer's own remarks concerning the voice parts in " Pelléas and Mélisande " which is at present the most noted music-drama of the French School by Claude Debussy:

> I have been approached because in my score the melodic phrase is always found in the orchestra, never in the voice. I wished — intended, in fact — that the action should never be arrested; that it should be continuous, uninterrupted. I wanted to dispense with parasitic musical phrases. When listening to a musico-dramatic work, the spectator is wont to experience two kinds of emotions: the musical emotion on one hand; and the emotion of the character (in the drama) on the other. Generally these are felt successively. I have tried to blend these emotions, and made them simultaneous. Melody is, if I may say so, almost anti-lyric, and powerless to express the constant change of emotion or life. Melody is suitable only for the song (*chanson*), which confirms a fixed sentiment. I have never been willing that my music should hinder the changes of sentiment and passion felt by my characters. Its demands are ignored as soon as it is necessary that these should have perfect liberty in their gestures as in their cries, in their joys as in their sorrows.

There are no arias, much less ensemble numbers or chorus in the score. The object and plan of this new music-drama is the perfect blending in actual practice of action, scenery, stage-craft, text, and music, with the subject of the drama. Another aim sought to be accomplished is a completer illumination of the ideas by the aid of all the arts that are accessory in its service, none of which is allowed to dominate, least of all personality at the expense of plot and substance. Actors and singers are to be less assertive, " declamation throughout is founded upon the natural inflection of the voice in speaking — virtually only a heightened form of speech "; neither is the music more than a harmonic background, employed for the purpose of clarifying, heightening all that would remain obscure by speech alone. The music never rises to independent climaxes of its own, except in so far as the dramatic ideas warrant their employment. Instead of lyrical or orchestral outbursts in emotional ecstasy, they are often repre-

sented by moments of significant silence, evidently the better to arouse a natural impulse in the mind of the auditor, and induce him to make his own deductions, from suggestions rather than from prepared, individually biased interpretations.

In a more recent drama entitled "Blue Beard" (of old fame) by Ducas, the musico-declamatory confines are still more marked in the sense that the natural flow of the dialog is represented by almost unbroken continuity, with especial regard to time in which a certain number of words, phrases, and sentences would be delivered by natural speech. It will thus be seen why formal melody is not, and cannot be placed in the voice-parts; but nevertheless the structure is so contrived that a sympathetic, electrifying passage or subject enunciated by the singer is adequately supplemented by a telling eloquence in the melodies and harmonies placed in the music of the orchestra. Harmonic modulations occur sometimes in every beat of a measure and continue until the musical story is told. There is no resemblance to the melodramatic effect nor to the intrusive insatiable sweetmeats of the amorous musical romanticism. Fidelity to subject, unswerving religious adherence to the ideal, delicate restraint of the grossly emotional, are the virtues of this new school of music.

The principal exponents are Debussy, Duparc, Ravel, Vincent d'Indy, de Bréville, Charpentier, Ducas, Loeffler.

The entire musical structure is based on a six-toned progression consisting of the intervals C, D, E, F-sharp, G-sharp, A-sharp. This may be termed a scale, but as such has no precedent in musical history. Otherwise all the tones of the chromatic scale are used. A persistent use of the chord of the augmented triad, for example: C, E, G-sharp, in positions of the chromatic scale is also one of the characteristics; in fact, the frequent use of augmented intervals is a typical distinction of the structural elements of this school.

FEAR nothing, for every renewed effort raises all former failures into lessons, all sins into experiences. Understand me when I say that in the light of renewed effort the Karma of all your past alters; it no longer threatens; it passes from the plane of penalty before the soul's eye, up to that of tuition. It stands as a monument, a reminder of past weakness and a warning against future failure.

Katherine Tingley

THE ANCIENT AMERICANS: by T. Henry

III

The Creation

In the beginning God created the heaven and the earth. And the earth was without form, and void: and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters.— *Genesis,* i, I, 2.

REFERRING to the *Analytical Concordance* of Dr. Robert Young, we find that the Hebrew word *rûahh,* translated "Spirit" in the above passage, is given the meaning of "spirit, wind." The same authority tells us that the word which is translated "God" in both cases, the Hebrew *'elohîm,* is a plural word, whose meaning is given as "gods, objects of worship." In quoting from the cosmogonies of the ancient Americans we must bear in mind this more exact meaning of the original Hebrew text — namely, that the *breath of the divine powers* moved upon the face of the waters, or that a *divine wind* breathed over the deep.

The author of the *Myths of the New World* (Brinton) reminds us first that in the Finnish epic of *Kalevala,* the bird floated over the waves and hatched the land; and that in the Norse *Edda* there is a similar legend, as also in the Chinese. Then, passing to America, he cites the case of the Muscokis, who say that before creation a great body of water was alone visible; two pigeons flew to and fro over its waves, and at last spied a blade of grass. Dry land followed. The Athapascas trace their descent from a raven,

a mighty bird, whose eyes were fire, whose glances were lightning, and the clapping of whose wings was thunder. On his descent to the ocean, the earth instantly rose.

The Quichés say:

The face of the land was hidden. There was naught but the salient sea and the sky. . . . Nothing was but stillness and rest and darkness and night; nothing but the Maker and Molder, the Hurler, the Bird-Serpent.

Over this passed Hurakan, the mighty wind, and called out, Earth! and straightway the solid land was there. And the Zuñis say:

With the substance of himself did the all-father Awonawilona impregnate the great water, the world-holding sea, so that scums rose upon its surface, waxing wide and apart, until they became the all-containing earth and the all-covering sky.

We might quote much more, but it would be tedious and the above

will suffice for illustration. Also, were we not dealing specially with the Americans, we might quote from the Mythologies of many other lands, to the same effect. What has to be considered is the meaning of this universality and identity of form in the creation allegory. It all points back to remote days when the teachings of the great Wisdom-Religion or Secret Doctrine were universally diffused, in the ancient mystery-language, which taught in symbols. As the races became scattered, the tongues confused, and the offshoot peoples scattered abroad and at enmity with each other — all of which took place when the dark cycle in history came on — each people embalmed its recollections of the sacred teachings in a collection of myths or religious epics; and so we have the Finnish *Kalevala,* the Norse *Edda,* the myths of the New World, the Hindû cosmogony, and the Chaldaean ("Bible") scriptures; and doubtless such epics as the Trojan War are of similar origin though dealing with a different subject. This we believe to be the true and only rational explanation of these phenomena.

As to Creation, one might well ask whether it is easier to assume, like the most uncultured tribes, that the world never had a beginning, but was always as it is now; or to imagine that it was created at some epoch out of wind and water or the divine breath and the eternal substance. If we suppose the latter, we are still face to face with the old irresolvable difficulty as to the beginning of time. The Secret Doctrine teaches that the worlds are remanifested anew over and over again, relapsing after immense cycles of time into chaos once more, and again being reborn. All our thoughts, in our present stage of development, are conditioned by space and time, and we cannot eliminate from our thinking processes the notion of a succession of events; hence we cannot get to the bottom of the mystery of eternity. To do the latter, we should have to stand outside our own mind, so to say. For the present, therefore, we must be content with lesser objects.

The "end of the world" is also symbolized in the same kind of language as its beginning; and the reference is to the end of a great cycle of evolution, when the manifested has returned again to the unmanifested, the expansion has given place to contraction, and the period of a *Pralaya,* or state of abeyance and rest, has set in.

The Origin of Man

Man's mother is the Earth; the Earth-Mother bore him. Such a goddess is to be found under innumerable names — as Demeter,

Gaia, Cybele, Isis, Mâyâ, Eve, etc. This much will be admitted by modern evolutionists, though they may consider the language too pictorial and prefer their own jargon. Needless to say, this "Earth" is not the ball of cosmic dirt that ordinarily goes by that name; it is much more like the "Protyle" of Crookes, the "Hyle" of other philosophers, the "Ether" of science, or the Primordial Matter or Root-Substance of some philosophies. It is the rudiment of matter, the parent-substance from which all concrete forms are produced. A mother implicates a father; and, since this duad or father-mother requires the postulation of a precedent monad, we get the Trinity; or we can obtain another Trinity out of father-mother-son. In the philosophy of modern biological evolution, it would seem as though the Earth-Mother was endowed with parthenogenetic attributes, since we find little mention (if any) made of a "father." In other words, the Divine Thought plays no part in this evolutionary philosophy. The more ancient and enduring teachings, however, recognize that man (not less than other beings) is the manifestation of the Divine Thought; and they have been logical enough to surmise that the plan which we see unfolded in man must have pre-existed *as a plan* in some mind, even as the form of the jar has pre-existed in the potter's mind. Perhaps the limitations of many modern evolutionists would not have mattered much if they had not attempted to build a philosophy of life on their biological views and to force that philosophy on the acceptance of the world. But as this is just what they did, the result has been disastrous, for man has been represented as a purely terrestrial being, the lower side of his nature has been overemphasized, and a materialistic perversion of his ideas and his morals has resulted, from which we are now suffering. Hence the importance of recognizing that Earth is man's mother; for that may serve to remind us of the Father. We are reminded in this connexion of certain information that recently appeared in the papers to the effect that, in one of the ancient Oriental Creation stories lately discovered, the Deity was represented as a female. One might also mention the very much altered symbol of the Virgin, so characteristic of one particular form of Christianity; undoubtedly this can be traced back to the classical cult of the Earth-Mother; while philologically and mystically the relationship is shown by the names Maria, (the Cosmic Virgin or the Sea or Great Deep), and the Sanskrit root MÂ, which appears in the Sanskrit *Mâyâ*, the Greek *meter*, the Latin *mater*, the German *Mutter*, our own

mother, etc. It will be superfluous to give quotations from our author illustrating the legends of various American tribes on this point, as that can be left to the diligent student. But we must emphasize this ancient belief in the dual parentage of man, as it constitutes one of those lost keys, for the want of which we have wandered so far in the mazes of fruitless speculation.

The Destiny of the Soul

The next point shall be the destiny of the Soul. It is not surprising to find that there has been universally a belief in the immortality of the Soul, for it is difficult to see how a philosophy of life can be founded on the contrary hypothesis. There is no argument as regards "proof" to be brought against the belief in immortality which cannot equally well be brought against the sceptical attitude; while the former belief has in its favor all the real evidence. In the list of contents of a chapter, we find the words: "The future world never a place of rewards and punishments;" and turning to the text, discover this:

> The typical belief of the tribes of the United States was well expressed in the reply of Esau Hajo, great medal chief and speaker for the Creek nation in the National Council, to the question, Do the red people believe in a future state of rewards and punishments? "We have an opinion that those who have behaved well are taken under the care of Esaugetuh Emissee, and assisted; and that those who have behaved ill are left to shift for themselves; and that there is no other punishment."

Neither the delights of a heaven nor the torments of a hell, we read, were ever held out by the priests as an incentive to well-doing or a terror to the evil. Such devices, it may be added, are not proper to any religion in its pure state, but are introduced into most religions when the strength goes out of them. The motives appealed to — those of cupidity and fear — are certainly not of the highest. And we read further that the abodes to which the departed soul took its journey "were not always his everlasting home." This quite agrees with the teaching as to *Devachan,* or the state of bliss wherein the freed Soul rests between incarnations; and we may recall in the same connexion Cannon Farrar's book, *Eternal Hope,* in which he bases his views on what he regards as the correct translation of the word *aeonian* (αἰώνιος), translated in the Bible as "eternal," but, as he says, meaning "age-long"; Gladstone's ideas about indefinite progress for the Soul in the future life; and the views of many prominent divines of the present day. People have, in short, practically given up former

crude ideas respecting eternal bliss and punishment; so that in endeavoring to impress these upon the aborigines of America, we were throwing a boomerang, so to say, and have been forced to adopt ideas more conformable with theirs.

How many Souls has Man?

There was very little of the ancient Wisdom-Religion (based on man's purified perceptions or intuitions) in our old theological notions; but a good deal of it in the ideas of these "primitive" Red Men. For instance, we find a page in our author's book headed, "The Multiple Soul." The idea that man has only one soul is rather elementary, to say the least. The idea that he has more than one may help to explain the sepulchral rites of many ancient and still-existing races, as also the theories of certain eminent scientific men who have been experimenting in psychic research and emitting ponderous disquisitions on the results. The Egyptians speak of *seven* souls, according to Gerald Massey; and Brinton recalls that the Rabbis taught a threefold division. This was into: *nephesh,* the animal soul; *rûahh,* the human soul; and *neshâmâh,* the divine soul; corresponding (as Brinton says) to the Platonic *thumos, epithumia,* and *nous;* while in the Epistle to the Romans we find Paul speaking of the bodily soul, the intellectual soul, and the spiritual gift. Now which of these souls is immortal? Evidently the soul can be mortal or immortal, or both at once, according to what we mean when we say "soul." It is not to be expected, however, that every humble Red Man would have a clear idea of the mysteries of his own religion; or that those who had such an idea would be willing (even if they were able) to impart the same to a missionary. So that altogether there is plenty of ground for confusion and misunderstanding. The fact remains, however, that these tribesmen do possess relics of a religion that dates back to the ancient Secret Doctrine, and whose symbolism both veils and discloses its profound origin and character. We would do well to study it better.

The "Shade" and the Second Death

In this connexion is mentioned the custom of interring with the body of the departed such objects as he used while on earth, for the alleged purpose of supplying the wants of the discarnate soul. Needless to remind the reader that this custom is world-wide and by no means confined to the American Indians. Yet, by studying their

beliefs in a spirit of sympathetic and therefore intelligent inquiry, we find that these are by no means consistent with the childish and superstitious notions assigned to these peoples by their unsympathetic critics. The explanation of course is that the soul which was accommodated by these sepulchral offerings was not the immortal incarnating soul — the intelligent part of the man — but the mere shade or spook. The teaching on this point will be found in Theosophical manuals; and Theosophy was referred by its expounder, H. P. Blavatsky, to the beliefs of all mankind in all ages, which beliefs she has so ably collated and digested in her books, *Isis Unveiled* and *The Secret Doctrine*. The result of this comparison has been to sift out the essential truth from the various forms in which it was guised, and thus to arrive at the teaching of the Secret Doctrine. Briefly, we may say here, that subsequent to the death of the body, there is a *second death;* for the complete separation of the various principles composing man does not take place all at once. On the death of the body, the immortal part is withdrawn, leaving behind the "shade" or "spook," which survives for awhile and slowly disintegrates. We shall find this fact referred to everywhere; in the Greco-Roman mythology, for instance, where the postmortem abodes were three — Hades or Erebus, Tartarus, and Elysium. The first of these is the abode of shades, where, in Vergil, (Bk. vi) the father of Aeneas, as well as several other persons, comes to address him. Tartarus is the place where the evil passions go to be purged out — the lowest *Kâma-Loka* in the Theosophical terminology; and Elysium is the abode of the liberated Soul, whence after long years it returns. All ancient nations seem to have recognized a necessity for certain rites intended to "lay" or put to rest the shade; which otherwise might infest the living to the detriment of the latter; a thing which undoubtedly happens in our own neglectful civilization.

With regard to future punishment, one cannot but speak feelingly of the disbelief of these aborigines in that infliction, and of the painful contrast offered thereto by the teachings of a narrow dogmatism in our own lands. Truly, all who have lived through half their life and have been cultivated enough to think and feel deeply, know well that we have affliction enough in this life, and that what the poor distraught Soul needs after death is rest and peace and joy. And we have learned a truer sympathy with the wicked, knowing, as we do, that the eye of Wisdom can make but little distinction be-

tween one man and another on the score of guilt; all being alike hard-pressed. The worst sin is selfishness, and there is no need for a deity to punish this, for it brings its own retribution. A merciful deity would do all possible to save a man from reaping this woe by hindering him in his course of selfishness. The statement that a consuming fire awaits those who set their will against the order of nature, is true enough; but there is no need to make a special region of sulphur for it. Often while on earth we have been "in hell."

Certainly the narrow dogmas which we have inherited from dark days in our religious history do not belong to the genuine old teachings of Christianity or of any other religion in its pure state; and least of all to the Universal Religion. A soul tortured by its own evil desires and reaping their bitter fruits, whether in this life or after death, must win through some time. And as for eternal bliss, surely it is the state of the Soul which has emancipated itself from all selfishness and the source of all woe.

Ideal Men

We conclude with a reference to the subject of ideal men, such as the great Teacher Quetzalcoatl; to the belief that such great Hero-Gods lived on earth in the past and taught men, striking the key-note for subsequent cycles; and to the conviction that such men can live in the future; — in a word, we refer to the subject of human perfectibility. Such a belief constitutes for the believer a complete answer to all the pessimists; for he refers all man's present helpless ignorance to the circumstances of his imperfection. We have not yet learnt how to use the life that is ours. We live in temporary purposes, which are necessarily frustrated because they are not in accord with the universal scheme of things. We find it hard to realize that suffering is incurred by the Soul for its own purposes. Christians recognize an ideal man — Jesus Christ — but have added the dogma that he is unique and incomparable, whereas his own recorded teachings declare that he believed his followers could and should follow in his footsteps. Moreover we have taken the backbone out of our ideal of a Christ-like man — made it too effeminate and wishy-washy. A false antithesis between "Pagan joy" and "Christian humility" has grown up, dating back to the days when Paganism was corrupt and licentious and Christianity bigoted. And the virtues of Chivalry have found themselves at variance with the virtues of religion. So that

it really seems we can learn valuable lessons from ancient peoples who, however reduced from their former greatness, have not succumbed to the same set of failings that we have. We can learn these lessons if only we will give up the patronizing attitude we can so ill afford to assume and be willing to learn what can be learnt even from the humblest. The true province of archaeology should be to unearth the buried wisdom of our ancestors.

THE MIND-MIRROR: by A Student

(FROM THE ARABIAN)

AS I stood in my tent at night making ready to stretch out my tired limbs upon the rug, there came suddenly a silver radiance upon the tent wall and a sense as of a spiritual presence, and I knew that I was not alone.

But I saw no one. Yet a voice said, "Look upon me."

The voice came from behind me and I turned to see. But the presence moved likewise and in no wise could I get mine eyes upon it.

The voice said, "Thou mayest behold me in thy mirror." But though I held it up I saw him not.

The voice said, "The mirror faces forward toward the tent door and reflects but the palms and the camels and men moving outside. Moreover it is unpolished and rusty and trembles unceasingly in thy hand."

The radiance departed and there was silence.

Next day and for many days I polished my mirror and perfected its surface and practised till I could hold it steady.

In the stillness of another night the radiant presence came again. I held the mirror so that it imaged his form behind me and I knew it for mine own soul. And upon the steady silver surface he threw many pictures of my own forgotten past and all that I had done of sin therein, so that I knew how that which I now suffered, and how that by which I was now tied and bound, had my deeds of the past for their sole cause. And he showed me my path of duty, and the peace and growing joy of the future if I went stedfastly by that path.

All this I saw and was humbled and rejoiced and made clean.

So it was; so it was.

ASTRONOMICAL NOTES: by Helios

PECULATION concerning the greater universe beyond our relatively insignificant solar system is greatly increasing of late owing to the accumulation of new and unexpected information about the stars and nebulae, largely derived from spectroscopic observations. In giving attention, however, to ingenious and fascinating theories of universe-building based upon these data, we must never forget that they all are but tentative, and are strictly limited by the conceptions of physics accepted at the moment. It must be remembered, too, that the accuracy of spectroscopic observations is powerfully affected by the light rays having to pass through the Earth's atmosphere. First-class authorities sometimes disagree on the interpretation of the information given by the spectroscope. For instance, by analysis of the light reflected by our waterless and airless Moon as compared with that of Mars made in dry air at great heights, Professor Lowell and his staff are convinced that they have demonstrated the existence of large quantities of water vapor and oxygen on Mars. But other careful observers such as Professor Campbell and Professor McAdie, who have made elaborate spectroscopic observations of the same nature at still greater heights, declare that they find no essential difference between the spectra of Mars and the Moon as far as water vapor is concerned, and that the quantity on Mars, if any, must be extremely minute. Such contradictions as this lead to the suspicion that some unknown factor in the surroundings of our globe vitiates one or both of these observations and that the testimony of the spectroscope about the constitution of the almost infinitely distant stars and nebulae is, to a degree, unreliable. It seems likely, however, that the spectroscopic method of measuring the speed of objects moving in the line of sight, by the "Döppler principle," is trustworthy, for it has been tested upon the planets whose rate of motion is known. By means of this ingenious analysis of their light, the speed of a large number of stars has been measured, and, during the last four years, that of over forty nebulae, a triumph of skilful observation which seemed incredible a little while ago. The rate of motion of the nebulae is enormous, the average of those measured being twenty miles a second. Some reach the speed of two hundred miles a second. Twenty miles a second is a much higher average speed than that of the stars, and a consideration of this has given rise to a revolutionary hypothesis, just announced from the Lick Observatory, that the neb-

ulae, instead of being younger than the stars and planets, are far older!

To make this clear we must recollect that an unexpected relationship has lately been discovered between the spectra of certain stars and their velocity in space. At the present moment it is generally accepted that the relative age of a star in its development from infancy to middle age can be detected by analysing the light emitted from its surface. Roughly speaking, the theory is that the stars which show the characteristic spectrum of helium are the youngest, those that are a little older display the presence of hydrogen, and the oldest are notable for a great development of the vapors of the metals. There are also intermediate types, and others which do not clearly fit into the general scheme. The helium stars are the slowest in movement, and the velocity increases as we approach the metallic stars, which are the fastest, and according to the new hypothesis, the oldest. The Lick observers, having found that the average velocity of the forty nebulae examined greatly exceeds the average of the stars, have drawn the natural deduction that the nebulae may be older than the most developed stars. If so, they cannot be the *prima materia* out of which the stars have evolved, but must be at the other end of the scale, and the Nebular Theory in any form may be relegated to the scrap-heap! Certainly the discovery of the high velocity of the nebulae is a very important and a very unexpected one, but the inference drawn that they are of greater age than the stars may not be sound, for it depends only upon the acceptance of the order of development mentioned above. Suppose the order to be inverted, and, taking the *slackening* of speed to be the criterion of increasing age, we should find the nebulae of high velocity taking their accustomed place at the dawn of evolution, and the development proceeding from the quick-moving stars with metallic vapors towards the slower helium stars and then to *stationary, inert* nebulae, and ultimately to final disappearance from this plane of perception. We should then have to look for intermediate links between the high-velocity nebulae and the moderately rapid metallic stars. Another point worth considering is this: many of the exceedingly brilliant helium stars, the so-called primitives, are involved in a shining nebular haze and so are considered to have a close connexion with the nebulae (in which helium is usually found). Now we know that helium is produced (on earth) by the disintegration of radium; how then can these helium stars be at the

beginning of evolutionary development? May they not be in the last stages of the cycle of necessity, their atmospheres disintegrating from denser matter and becoming more brilliantly white as they etherealize? There may be something even in the literal teaching of the *Vishnu-Purâna* where it says that the end of the age will come by the expansion of the Sun into the blaze of Seven Suns, for we know that the ancient Hindûs had observed the heavens for countless ages and had a profound knowledge of astronomical cycles.

But whether the high-velocity nebulae are the oldest bodies in the sky as the Lick observers suggest, or otherwise, there can be no doubt, at least to the student of Theosophy, that some kind of nebula is the first form of manifestation. H. P. Blavatsky definitely states that there is a large substratum of truth in the general principle of nebular origin for the stars and planets, though she does not endorse the Laplace or any other nebular theory. To those who are interested in this stupendous question, the chapters devoted to it in *The Secret Doctrine* will prove of great service.

While astronomical research and speculation have been increasingly directed in recent years to the greater universe outside our solar system, the study of the planets has not been neglected, though comparatively few startling discoveries have been made for some time in this branch of the subject. Among the more striking observations recently announced those concerning Uranus are specially interesting. Spectroscopic analysis of the light reflected from that planet proves that it rotates on its axis in about thirteen hours, and that the direction of its rotation is backwards when compared with that of all the other planets, except probably Neptune. This confirms what has long been suspected in consequence of the reverse movement of the satellites of Uranus. Uranus is now in a favorable position for observation and the existence of belts parallel to the equator has been definitely established. The planet has been seen to have a pronounced bulge at the equator, and it has been proved that one of its satellites always turns the same face to its primary, just as our Moon does to the Earth. The largest satellite of Saturn, Titan, has lately been found to do the same thing.

Nothing conclusive has been discovered of late about conditions on Mercury or Venus, comparatively near though they are; even their period of rotation is yet in dispute. Long-continued observations of Jupiter's belts have at last established the fact that his year (equal

to twelve of ours) is marked by a distinct change of color in the northern and southern hemispheres according to the season, a reddening of the belts becoming visible as the spring advances in either hemisphere. This is an exceedingly interesting phenomenon for it suggests the possibility of there being some form of life on Jupiter which awakens after a winter's sleep. It is the more remarkable because the inclination of Jupiter's axis is very slight (3° 4′), hardly enough, one would think, to produce any noticeable effect.

It has long been known that there are tremendous currents on Jupiter; the equatorial belts taking six minutes less time to rotate than those nearer the poles. In this Jupiter resembles the Sun. From the year 1879 the equatorial current gradually decreased in speed till 1889, after which it remained the same for about twenty years; now it is returning to the original rate of 1879. This mysterious phenomenon is quite unexplained, but it offers another example of the great law of periodicity whose full comprehension is one of the most important factors in the study of the teachings of Theosophy.

Dr. Slipher of the Lowell Observatory, Flagstaff, Arizona, has lately claimed conclusive corroboration of his and others' observations of the so-called "canals" on Mars and particularly of their seasonal change of color. In the *Scientific American* for Oct. 17, 1914 Dr. Slipher vigorously defends himself and the other distinguished astronomers from the criticisms of those who deny their conclusions about the "canals." Dr. Slipher does not suggest that these fine dark lines, double or single, are the actual waterways, but he thinks it practically certain that they are irrigated tracts of growing vegetation which become visible as the martian spring advances and the water begins to circulate through the small channels leading from the melting ice or snow caps. Eye observation and photography have both confirmed the change of color in the "canals" according to the season. As the northern summer advances and the snow cap melts the northern lines intensify in color and in some cases become double; the southern ones do likewise in their season. Dr. Slipher says: "We are no longer concerned with the discovery of new markings, but are pursuing a more detailed study of their appearance and behavior in search of the key to this most engaging riddle of the solar universe." He seems to hint that there is some insincerity of purpose in the minds of the critics who decry the possibility of the "canals" being irrigated tracts. But lack of imagination might fit better.

In connexion with the possibilities of intelligent life on Mars as urged so strongly by Professor Lowell, Dr. Slipher, and others, a passage in *The Secret Doctrine* quoted by H. P. Blavatsky in a letter from one of her Teachers has given rise to speculation on the part of some. It runs: "It is quite correct that Mars is in a state of obscuration at present . . ." (*Secret Doctrine,* p. 164, Vol. I) Obscuration being a condition on which planetary life is at a very low ebb, some have imagined that this passage implied that Mars is quite devoid of inhabitants. There is no reason to assume this, for the same Teacher casually mentions that "the Jovians, Martians, and others, can perceive our little world." (*Secret Doctrine,* p. 166, Vol. I) In a special article in one of her magazines, H. P. Blavatsky published this remark written by a student: "It will not be easy to understand the doctrine under consideration completely until the nature of the Obscurations and the periods of the duration of the different races of the planets are clearly ascertained. Nevertheless, I can state here that a planet may be said to be in a state of Obscuration when a small portion of it is inhabited." (*Theosophist,* June 1883, p. 232) The problem of life on Mars is a very interesting one, but it is not likely that astronomers with their present means of investigation will be able to settle it.

New spectroscopic evidence from the Lowell Observatory has just been announced, more completely confirming the probable presence of water-vapor and oxygen in the atmosphere of Mars. On the Earth the greatest quantity of moisture in the air is found in the tropical regions, but in Mars those parts are the dryest. In Mars the polar regions are most heavily charged with moisture, produced apparently by the melting of the snow caps. As there is nothing but dry land in the middle belt little evaporation can be expected there. If the spectroscopic evidence is to be trusted, this distribution of moisture in the atmosphere of Mars strongly supports the theory that the planet depends upon the melting of the polar snows for its water supply.

A startling suggestion in support of the belief in the injurious effects of strong moonlight has lately been offered. In tropical and semi-tropical countries, where moonlight is far more intense than in northern climes, it is widely believed that among other uncomfortable properties, the direct rays of the moon have the power of rapidly decomposing meat and fish. This has been derided and ridiculed on *prima facie* grounds (as usual!) by some who have not examined the

evidence. A correspondent to the *Chemical News,* writing about certain experiments recently made in South Africa, offers a probable explanation in the fact that the light of the Moon being reflected light is polarized to some extent and that possibly polarized light exerts some hitherto unknown chemical action. The London *Lancet,* in commenting upon this, admits that the experiments were very striking. In one case, slices of fish were hung in ordinary light and others from the same fish in polarized light; the latter decomposed first, though the polarized beam was not so warm as the other. According to the teachings of Theosophy there are many influences due to the Moon which are not yet suspected by modern science, yet which are of great importance for our welfare.

YET in the prognostication of *such* future events, at any rate, all foretold on the authority of cyclic recurrences, there is no psychic phenomenon involved. It is neither *prevision nor prophecy;* no more than is the signaling of a comet or star, several years before its appearance. It is simply knowledge and mathematically correct computations which enable the WISE MEN OF THE EAST to foretell, for instance, that England is on the eve of such or another catastrophe; France, nearing such a point of her cycle, and Europe in general threatened with, or rather, on the eve of, a cataclysm, which her own cycle of *racial Karma has led her to.* The reliability of the information depends, of course, on the acceptation or rejection of the claim for a tremendous period of historical observation. Eastern Initiates maintain that they have preserved records of the racial development and of events of universal import ever since the beginning of the Fourth Race — that which preceded being traditional.— *H. P. Blavatsky* in *The Secret Doctrine,* VOL. I. p. 646 (written in 1887-1888)

ANCIENT AMERICA AT THE PANAMA-CALIFORNIA EXPOSITION, SAN DIEGO, CALIFORNIA: by Edgar L. Hewett (Director of the School of American Archaeology).

FOR the first time in the history of Expositions an entire building is devoted to Ancient America. Not one for which no other use could be found, but the noble California building, greatest of all in the Exposition city.

Here will be seen the most important works of the ancient peoples of Central America. They present a picture of an age in America of which Americans generally are not well informed, namely, that which immediately preceded the coming of Europeans to the western continent. Knowledge of American history usually begins with the period of discovery and conquest, and follows down to the present time. Here we begin at the usual point and looking back, view the history of a civilization that reached its zenith and went down before it was known to white men.

The cities that have long lain buried in the tropical jungles have been the subject of much misleading romance. Fantastic theories about these people, their Oriental or Egyptian origin, their empires, kings, queens, and courts, the mystery of "Vanished Races" — all this may be dismissed. There is nothing mysterious about it. The ancient temple builders of Central America were American Indians. All the characteristics of the race are seen in these ancient monuments. Like other races they slowly struggled up through a long period of evolution, matured, for a time expressed their mental and spiritual power in great works, ran their course and died, as is inevitable with individuals and races when they grow old.

It would be misleading to pretend that any connected history of the Central American Cities could be written at this time. Their records, in the form of hieroglyphic inscriptions, are a sealed book, except as they relate to numeration and chronology. None of the characters used in the writings of the Mayas bear any resemblance whatever to those of the Egyptian or any other ancient people. All reports to the effect that Orientals have been able to interpret the symbols of the Central American monuments, or understand the language of the native people, may be put down as false.

For the study of the hieroglyphic writings we must depend mainly upon the inscriptions carved on stone. These, found on monuments,

walls, tablets, and lintels, have survived the ruin of ages. Sacred books, or codices, were once numerous, but now only three are known to exist. Large numbers of them were destroyed at the time of the Spanish conquest of Yucatan on account of their supposedly pagan character.

Nothing could be set down as final with reference to the date of any Central American city in terms of the Christian calendar. In the subject of Maya chronology there is little agreement among students. Certain authorities, who are worthy of the highest respect, date the Maya cities as early as the twelfth century B. C. Others place them in the early part of the Christian era.

Without entering upon a discussion of this subject, the writer is disposed to fix the period represented by the monuments in this exhibit, within the first thousand years of our era. During the first half of this millennium civilization flourished in Central America, attained its zenith, and during the latter half, through causes unknown to us, decline occurred.

Among the older cities are Copan, Quirigua, Tikal, and Palenque: the later are Chichen Itza, Uxmal, and other cities of Northern Yucatan. When America was first seen by the Europeans, the Central American cities lay in ruins in the jungles, as they do now.

Evidences of a long period prior to the setting up of the sculptured monuments and the inscriptions of hieroglyphic tablets are now being found in Guatemala. No proof exists to show that this civilization was derived from Egypt or the Orient. On the contrary, it appears certain that during a period of many centuries it arose, flourished, and declined upon the soil of Central America. In this it resembled the Egyptian, which ran its entire course in the Valley of the Nile.

It is customary to speak of the people of all the Central American cities as the Mayas, but that they were all of one stock cannot be claimed with certainty. It could not be proven that the people of Copan and Quirigua in the Motagua Valley spoke the same language or that they were the same stock as the people of the cities of Yucatan or the Usamacinta Valley in Mexico. The fact that they used the same architectural principles in building and the same hieroglyphic symbols is not conclusive of linguistic or ethnic identity. In the Rio Grande Valley in New Mexico it is not uncommon to find two Indian towns less than twenty miles apart where the people speak entirely

different languages, yet build their houses and sanctuaries in the same way, and use the same symbolic characters.

The ancient cities of Central America may properly be spoken of as " Temple Cities." Among the ruined buildings there is little to suggest residential use or domestic life. It is probable that the ancient people lived much as do those of the present time, in houses of bamboo, or other light material, thatched with palm. This civilization was profoundly religious in character, a trait of the entire American Indian race. With probably no other people known has religious ceremony been so generally intermingled with all the activities of life. As the condition of society called for nothing elaborate in residence building, so, also, the political organization was such as to require little in the way of public building for civic purposes. Monarchy was unknown. The government was theocratic and republican in character. There was no splendor of courts and no state government to provide for.

But religious life was highly organized. Everything else was subservient. The mysteries of the priesthood necessiated sanctuaries, shrines, altars, gorgeous vesture, and representations of gods. Imposing ceremonies, processions, and rituals demanded temples, sacred precincts, and facilities for the display of magic power with which to awe the populace. The building of a city meant the erection of temples and statues and their embellishment with images, inscriptions, and symbolic decorations.

Never before have the noble works of the Mayas been given such a setting as here in the Exposition of San Diego, and never before have they been presented in such perfection. Some of us dare to hope that this is the beginning of a general awakening to the importance of a great people, possibly to the opening up of a veritable treasure-house of knowledge, long obscured but not destined to perpetual oblivion.

WHAT with the great war, and the serious earthquakes in Turkey and Italy, some predictions regarding the years 1915-16 look in a fair way of fulfilment. What causes earthquakes? Tectonic action, in most cases, would be the reply. And what causes that? Readjustments of stress on fault lines. But what is the cause of these? Oh, we don't really know, you know! F.

LA FORCE MYSTÉRIEUSE*: par J. Charpentier

(Rédaction de *La Vie,* Paris).

SOUS ce titre, M. J-H. Rosny, dont nous avons eu l'honneur de préciser ici l'œuvre et son caractère scientifique, vient de publier un nouveau livre, qui — indépendamment de sa beauté littéraire — s'impose à l'admiration par l'originalité de son sujet, l'intérêt supérieur du problème qu'il soulève.

Nous sommes en plein XXme siècle, en pleine efflorescence de cette civilisation, tout entière édifiée sur les découvertes de notre génie pratique et qui aveugle à ce point notre orgueil que nous croyons, enfin, avoir asservi la matière. . .

Nouveau Prométhée, l'homme s'affirme désormais le maître des éléments. Nul miracle ne saurait s'accomplir qu'il n'ait provoqué, et seulement enthousiaste de ceux qu'il réalise chaque jour, il cesse de s'étonner des plus prodigieux, tel celui de sa naissance et de la perpétuation de son espèce. . .

Mais voilà qu'un soir, tandis qu'il s'apprête à aller rendre visite à son maître — le vieux physicien Langre —, le chimiste Georges Meyral s'avise, devant son miroir, que son image est traversée de zones brumeuses et que la lumière semble atteinte d'une maladie indéfinissable.

Dans le laboratoire de Langre, le prisme, interrogé, décèle un empiètement du rouge sur l'orangé, du jaune sur le vert, comme si la lumière était dédoublée sur tout le parcours du spectre. . .

Perplexes, les deux savants hésitent à admettre l'hypothèse d'une intervention énergétique extérieure, hypothèse que semble cependant justifier l'exaltation croissante des gens dans les rues. Des passants, pris de colères aussi soudaines qu'inexplicables, se précipitent les uns sur les autres et se livrent à des pugilats. Bientôt, un vent de révolte soulève en tourbillons furieux la populace des faubourgs. Toutes les haines accumulées par le prolétariat éclatent: l'émeute s'enfle en révolution; pelotons de police et escouades de cavalerie se heurtent aux foules ouvrières; le sang coule, les cadavres jonchent les ruisseaux. . . Et, par toute la planète, le même délire tragique qui secoue Paris provoque d'effroyables tueries. Tout entière, l'humanité subit l'effet de cette perturbation de la lumière que Langre et Meyral ont constatée sans pouvoir en déterminer la cause.

Et l'évolution du phénomène continue. . .

* Librairie Plon, Paris.

Après la période de fièvre qui les a jetés en assassins les uns contre les autres, les hommes entrent dans une phase de dépression profonde et meurent par centaines de milliers. . .

— Il y a une anomalie dans le violet. . n'a pu qu'observer Meyral. Un peu plus tard, il note un accroissement de la zone verte du spectre, accroissement auquel correspond un réveil de l'humanité.

La vie reprend, et c'est par toute la terre une véritable résurrection. La gamme du spectre chante comme par le passé: vert, bleu, indigo. . .

— Le soleil!

Le feu reparaît dans les foyers éteints, les hauts fourneaux se rallument; trains et navires sillonnent encore une fois notre vieux globe, encore frémissant de ce cataclysme qui a failli détruire l'espèce animale et sur laquelle les savants ne peuvent hasarder que des conjectures. . .

Cependant, des signes bizarres et qui, jusqu'alors, ne s'étaient jamais produits, se manifestent et, peu à peu, se précisent. . . Bêtes et gens éprouvent l'impérieux besoin de se grouper. Une anomalie nouvelle se déclare. Non que le flux qui a déferlé sur la planète agisse encore. . . Mais parce que les forces interplanétaires en s'attaquant aux forces terrestres et solaires ont suscité chez celles-ci, par réaction, des énergies potentielles, dont l'espèce humaine va avoir à subir les effets. Des taches *vivantes,* apparaissent sur la peau des hommes qui deviennent incapables, non seulement de s'éloigner au-delà d'une certaine distance, les uns des autres, mais de se séparer des animaux de leur entour. Dès lors, l'impossibilité de se nourrir de viande s'impose, et cette impossibilité provoque une nouvelle crise — *la crise carnivore.* Avides de sang, les individus d'un groupe s'attaquent à ceux d'un autre groupe pour les dévorer, sous peine de mourir en proie à d'affreuses souffrances. Quant à Meyral, s'il lui faut, au prix d'une résistance meurtrière, défendre ses compagnons contre l'assaut des gens d'un village voisin, du moins les sauve-t-il du carnivorisme en les nourissant de champignons dans la forêt. Il a découvert qu'une même substance, une même forme d'énergie — celles, justement, que semble réclamer l'organisme humain — se trouvent être commune à la viande et à la plante parasitaire, et il en nourrit les individus de son groupe, leur permettant ainsi d'attendre par ce moyen le rétablissement de l'équilibre planétaire. Celui-ci ne tarde pas à avoir lieu. Assez rapidement la vie normale reprend. Les journaux reparaissent; les

hommes cessent d'éprouver le besoin de se grouper, il leur redevient loisible de se détacher de leur entour et les relations les plus lointaines se rétablissent entre eux. Cette fois, le cauchemar est bien fini. Un congrès scientifique qui rassemble tous les savants du monde se propose l'étude des redoutables phénomènes dont l'humanité a failli mourir. Ce congrès, Langre le préside. Il y précise, avec tant de bonheur, les causes de la maladie de la lumière, qu'on l'acclame et qu'il connaît enfin la gloire qui l'avait jusqu'alors oublié. Dirai-je que, de son côté, Meyral qui aime la fille de son vieux maître, a le bonheur de la voir partager ses sentiments à l'issue de la crise que vient de traverser l'humanité?

Il importe peu, en vérité. Le triomphe intellectuel de Langre, le triomphe sentimental de son élève, nous paraissent des incidents bien mesquins, comparativement au formidable cataclysme auquel nous venons d'assister.

C'est comme une espèce de grâce que la destinée leur accorde, et dont on serait presque enclin à sourire...

Le drame, ici, est en dehors et au-dessus des passions humaines. Il les domine et les commande. Il repose sur une hypothèse qui s'appuie elle-même sur les données les plus rigoureusement scientifiques, et cette hypothèse est celle-ci: Une énergie interplanétaire peut-elle, en s'interposant entre le soleil et nous, provoquer une maladie de la lumière?

Malgré tout ce que nous savons, ou ce que nous croyons savoir de l'immortalité ou de la stabilité des manifestations physiques et chimiques de la nature, celles-ci sont-elles susceptibles de perturbations comme les phénomènes organiques? En d'autres termes, y a-t-il ou n'y a-t-il pas différence d'*essence* mais de *degré* seulement, entre la matière et les êtres organisés; et son équilibre peut-il ou ne peut-il pas, comme le leur, subir d'accidentels bouleversements?

Il le peut, répond M. J-H. Rosny. Et de cette supposition qu'il se plait à faire et qui n'a d'égale à sa hardiesse que sa simplicité, il tire, avec la puissance d'imagination, la rigeur de logique que nous lui connaissons, les conséquences les plus inattendues et les plus considérables.

Supposition hasardeuse! Supposition vaine! se récrieront dédaigneusement les hommes de laboratoire. Hasardeuse, soit! et peut-être M. J-H. Rosny est-il le premier à la trouver telle; mais vaine...

il suffit d'y réfléchir un instant pour voir quelles perspectives elle ouvre immédiatement devant l'esprit.

Admettez, en effet, que l'hypothèse de M. Rosny se réalise et considérez quelles conséquences peuvent résulter pour les habitants de la planète d'une altération de la lumière: voyez comme leur état physique et mental, comme les conditions de leur existence se modifient brusquement parce que les rayons violets du spectre se défendent mal contre les vibrations hélicoïdales qui les frappent... C'est l'écroulement de toutes les certitudes sur lesquelles notre science et notre philosophie s'appuient... Si la maladie est la règle, pourquoi le monde physique et chimique y fait-il exception? Quelle est la cause ou la raison de cette exception et comment évoluerions-nous sans elle? Ne peut-on la faire valoir pour affirmer l'existence d'une harmonie universelle et la possibilité du libre-arbitre?... J'abrège. Aussi bien, M. J-H. Rosny ne pose-t-il aucune de ces questions. Il suffit qu'il ait conçu l'hypothèse de cette rencontre de notre univers avec un univers différent de forme et de composition pour qu'elles se posent d'elles-mêmes devant nous. Et telle est la grandeur du rôle qu'assume, vis-à-vis de la science trop prudente et de la philosophie souvent hésitante, le génie hardiment spéculatif du savant-poète. C'est à lui, comme nous le disions ici même, puisque la science se refuse à sortir de l'observation la plus stricte et de la classification la plus rigoureuse, qu'il appartient de s'évader par l'intuition des banales certitudes et de découvrir à l'intelligence de nouvelles possibilités, de nouveaux rapports. Ceux que nous pouvons dégager de *La Force Mytérieuse* et des méditations qu'elle nous inspire, sont infinis.

Par la poésie sublime, *philosophique* de cette dernière œuvre M. J-H. Rosny aîné s'affirme le *Vatès* de la littérature française de ce temps.

THE myth [of Prometheus] belongs to neither Hesiod nor Aeschylus; but, as Bunsen says, it "is older than the Hellenes themselves," for it belongs, in truth, to the dawn of human consciousness. The *Crucified* Titan is the personified symbol of the collective Logos, the "Host," and of the "Lords of Wisdom" or the HEAVENLY MAN, who incarnated in Humanity. — *The Secret Doctrine,* ii, 413.

COUNT SAINT-GERMAIN IN VIENNA: by P. A. M.

XIII

COUNT Saint-Germain knew Vienna very well indeed. In fact, his "official" entry into France and his personal intimacy with the kings was due to an introduction by a powerful Viennese nobleman to the French Marshal de Belle Isle. But his French history is a story in itself.

What was he and what was his business? He was an occultist, but not of the bogus variety so well known in these days. His occultism was chiefly his humanitarianism. All he did led to humanitarian ends. He was also a Freemason. But his object was to help these people to help the world. He knew what was "true masonry" and and the "unknown master" of the same.

It is not our purpose to manipulate the records of this remarkable humanitarian and so we give them as they stand, merely taking the occasion to make a few remarks, by way of guidance, elucidation, and suggestion.

There is extant a book of sketches of Vienna life published by Franz Gräffer at Vienna. This man speaks much of Count Saint-Germain the "Wonderman." There were two brothers Gräffer, and Franz says that his brother Rudolph was rich. They seem to have kept a bookstore on the same lines as the famous one in Paris in the days of the Revolution, which was a literary and news club and the journal of which furnishes us with much interesting history of the day. Being a bookseller did not mean that Gräffer was not one of the prominent men of the capital in his own sphere.

The brothers were really disciples of Saint-Germain and it can hardly be doubted that they knew much more about him than he permitted them to tell. There is a suggestion of this in one of Franz Gräffer's sketches, which he writes because he feels the impulse after many years, not because he did not know that he had an interesting story to tell long before. His pictures are dramatic and striking and one is inclined to suspect that the peculiarities of style are intentional — repelling those who look upon what he has to say as mere literary entertainment, and attracting those who know how to gather a hint here and there to put into the mosaic of the inspiring and symbolical life of that great character whose name when published at his death was to "astonish Europe."

It is a long time ago; more than a hundred years. And yet the

picture is true, as it is true to every age. The genuine "Helper of Humanity" surrounded by the gold-mongers, the bogus alchemists, the fantastic enthusiasts, the dabblers in the weird, which they miscall the "occult," the unhealthy seekers after moon-magic which leads to lunacy indeed, mentally and otherwise.

It may not be out of place to indicate one or two of Saint-Germain's purposes. A Knower of the universal science, he could express it in the universal way — a language which is of no country. His production of a magic forest and magic deer from their "seed" is a beautiful ideogram of the creative genius of which men are capable. But it had the remarkable effect of bringing the great von Swieten a humble suppliant to the teacher. Von Swieten was no fool — and he seems to have thought more than he said.

It is interesting to note that Linné was honored with Saint-Germain's friendship. Who knows how much the world owes to the Count in the knowledge of botany through the famous Linnaeus?

The story of Montaigne about Maria Germain who was such a hoyden that she turned into a boy during her romping, is amusing as an anecdote, and none better than Saint-Germain would have known how to use it in half a dozen different ways. He was a great joker with people who were not serious, and what easier than to turn off with a laugh — against himself, perhaps — awkward questions? It is evident that there was some foundation for his reputation for an immense age. His private pupils, under the seal of secrecy, would know well the doctrine of Reincarnation. His memory of former lives would be vaguely put down as memories of his actual life; his age really was remarkable also; so remarkable that those who suspected the truth were none too anxious to lay themselves open to their friends' badinage by asserting their belief too loudly. Then again this half-concealing, half-revealing of the great truth of Reincarnation had a double effect. It made people think, and those who knew enough to think, frequently knew enough to seek what other teaching he had to give them. Fortunate they if they could also give the passport of a clean heart and devote their knowledge and energy to humanity's welfare alone! His store of knowledge for such was unlimited.

We glimpse another phase of his character; that of preparing the seeds of character which were to blossom later in world-flowers. He kept his eye on Mesmer, on Louis XV and Louis XVI and on the unfortunate daughter of Maria Theresa, Marie Antoinette. It was a

strange situation: Saint-Germain protecting the daughter of the Empress.

There was a strange puzzle about the Count's industrial experiments and inventions. He had diamonds and jewels worth millions, and yet he busied himself with inventions which some said were of untold value to industry and others said were always failures. The secret seems to have been that they were opportunities and that they succeeded or failed in exact proportion to the student's own worth. As one writer said, he declared that the failures were due to faulty manipulation, while the writer *knew* (!) that the ingredients were to blame. We shall have more to say of this elsewhere.

No apology would be needed for quoting a dozen times the remark "Let all these gentlemen (there is an army of them) study men more than books and they will discover secrets which are not to be found in Homer's golden chain."

The true explanation of the remark about the cessation of time and the "destruction of the world" scarcely comes within the province of the science of today, but the scientists of tomorrow will realize that it is based on sound knowledge. One has to remember that the Count was talking to a "Companion." There are more senses than one in which it may well be said that "time" has been compressed into a fraction of its eighteenth-century scope and that the old order has passed or is passing away, giving place to the new. "Behold I make all things new," says the Mystic of a former age.

. . . . . .

Photography in the XVIIIth Century

Among the famous group of physical and chemical researchers who distinguished Vienna in the eighteenth century, and who worked privately to avoid the humbugs and frauds so inevitably associated with this work, were the brothers Franz and Rudolph Gräffer, as above said. Franz leaves us some curious details of one or two picturesque incidents connected with the group. His brother was rich, a successful inventor, and acquainted with all the people of note who visited Vienna, and he himself was a literary man of some reputation. The natural secrecy of their experiments was very well kept for many years, but long afterwards Franz tells us some of their proceedings. He says:

"My tale . . . is entirely from memory. A peculiar, irresistible

feeling has compelled me to write the preceding once more after so long an interval, just today, 15th June, 1843.

" One more remark: there is reason to believe that no one has yet been able to report this incident. . . ."

No actual date is given for the occurrence recorded, but it should not be difficult to trace it, since the details give enough to form a good idea. It was roughly before or about 1775 or 1780 and almost certainly before 1785.

Speaking of the motley pack of seekers, genuine, fanatical, and fraudulent, Gräffer says:

"An unknown man had twice been present at the proceedings of that group; unintentionally contributing to their unmasking. . . .

"A noble enlightened spirit, one of the highest men in the country, had received instant news of this proceeding. It approached midnight."

He entered a sedan-chair, two torchbearers in front, two following.

At the " Wildmann " hostel in the Karntnerstrasse they halted.

" Where is the room of the stranger who is to leave early in the morning? "

He mounted a wooden staircase. . . . The room was without light, but a manly figure could be distinguished by a faint, peculiar light. He rose, moved a little candlestick and the room burst into flame. . . .

" No danger, mein Herr; it is combustible air, gas. You will have it in the next century; it will be common. What you see here is only an anticipation."

On the table, which was covered with writing materials, there was a layer of thin rectangular plates of silver.

" I am not here to inquire who you are," the visitor said, the picture of the Empress (Maria Theresa) shining forth from his breast in its bediamonded frame. " I could and perhaps ought to do so, but it is not that, honored Sir. The Man, as such, is of little importance, but his spiritual or moral power makes him remarkable and distinguished."

" We understand one another, mein Herr," replied the stranger. " You wish for information as to my power."

" Yes, your knowledge must be extraordinary."

(There follows a remarkable account of many things shown to

the visitor and then as a little excuse for taking so much time the stranger said:)

" In order not to be surprised by the ladies, I will make you a keepsake for them of my portrait."

With these words he took one of the thin silver plates and looked steadily at it close by the light of the candle, as one looks in a mirror. He handed the plate to the cavalier; it was an exact portrait of the magician.

How much astonished the latter was!

But the stranger said: " This discovery is also merely an anticipation, like all my inventions. People are struck only by the yet undiscovered, the yet uninvented."

The cavalier was quite absorbed in contemplation of the picture.

"Inexplicable! incomprehensible!" he exclaimed repeatedly. "You are right: Everything is only anticipation, priority alone makes the distinction: the first time, the beginning. The mythological gods were men centuries before the others discover things in physics."

" Yes, and you will have Daedalus and better in the next century. Every child has long known how to make thunder and lightning. This art of facsimile portrait-making will be discovered by a Frenchman. The people of Vienna, always full of talent, will carry it to the point of producing them in color." . . .

The magician said, " You have now seen and heard something of the things that are possible. How long and happily would men live if they had this before their eyes:

"Animal and spiritual, the highest thing in life is strength alone. Educate and beautify yourselves, your lives."

Having said this he stepped into the recess. The cavalier left.

Next day, the landlord said, " Last night, a gentleman from the Imperial Court was with the wonderful Unknown. . . . "

The great Swieten, whose ashes rest by those of Kings in the chapel of Saint Augustine. . . .

Comment should hardly be necessary, but we may say that the " process " does not pretend to be the same as any commercial process ever used; it was a symbol in fact, and there is reason to believe that a similar thing has been done in recent times. Nor does it pretend to be described by a scientist. For the rest it may be sufficient to say that the Unknown was the misrepresented and misunderstood inventor and master-musician, " Count Saint-Germain."

THE PANAMA-CALIFORNIA EXPOSITION, SAN DIEGO, 1915: by Observer

EVER has an Exposition begun with such a happy augury as did the Panama-California Exposition in San Diego on the night of December 31st, 1914. The soft balmy air of Southern California, the exquisite brightness of the full moon, the incomparable site, and the handsome buildings all complete (and this is the first Exposition in the United States of which this can be said on the opening day), the distinguished guests, the gay throngs, of whom thirty thousand passed through the gates on the opening night — all contributed to make the event memorable, and worthy of the occasion which it celebrated, namely, the opening of the Panama Canal.

New Year's Day dawned bright and clear, not a cloud in the sky, the birds were singing, the flowers were in bloom — for all the world it was like a day in June, and the city and the Exposition gave a right royal welcome to their thousands of guests. At the Exposition there were speeches and congratulations, and then more congratulations. San Diego had taken her place as a new-world Mecca, she had won her right to be regarded as one of earth's most favored spots.

Among the distinguished officials who were present at the Exposition were the following: Hon. William G. McAdoo, Secretary of the U. S. Treasury, representative of President Wilson, Mr. G. A. Davidson, President of the Panama-California Exposition, John Barrett, Director-General of the Pan-American Union, representing the American republics, Count Del Valle de Salazar, representative of the King of Spain, Hiram W. Johnson, Governor of California, Oswald West, Governor of Oregon, William Spry, Governor of Utah, William G. McDonald, Governor of New Mexico, representatives of the Governors of Arizona and Nevada, the Mayors of San Francisco, Oakland, Los Angeles, San Diego and other cities, as well as other distinguished people.

The Exposition site is magnificent, and large advantage has been taken of it. That upper part of San Diego, that looks back on to the mountains, none so fair, and forward over the lower city to the sea, to the promontory of Point Loma, and to certan dim violet islands afar — well, it has wonderful and exquisite possibilities. The views are beautiful, in quite a whole-hearted and soul-satisfying way. Then Balboa Park is peculiarly blessed in the possession of its many canyons.

Plant the slopes of these with trees; span this one with a bridge; set a balustrade along the brink of that one, and a walk behind the balustrade: and — you have really produced very wonderful results, of a kind you will not readily obtain elsewhere. One may go further and say that outside Southern California, and inside the United States, nothing like them are to be obtained at all.

So that this Exposition is a thing to see, really so, by those who hunger and thirst after Beauty: who long for deeper and more luminous revelations of it to enter into our sordid and foolish civilization and redeem that from the curse of greed and strife. There is something promising, something surprising and hopeful. The grounds are saying a very great deal indeed.

California has in truth a tremendous revelation to make to the world. In addition to what has already been said this is borne in upon one also in the many interesting exhibits of the products of Southern California. In the Art Galleries one notes that painter after painter has been constrained to try to paint rather with light than with pigment. You must roll a million kinds of glories into the one word *Romance;* such is the paucity of our language, due to the poverty of our perceptions. There is a wonderful wizardry of the sun in California; an inwardness in the mountains and wide valleys; an ancient mysterious beauty behind the outward glories of form and light and jewelish color. One can look forward a thousand years, and imagine man here, grown to the stature of his surroundings: under the influence of spiritual ideas, having laid aside the modern restlessness, jerkiness, angularity, crudeness and intense greed, and grown *quiet* a little, reverent and sincere, with the beauty of the sunlight and the mountains soaked into his consciousness. Then there will be great Art, great and astonishing poetry, a civilization worthy of the name. Our descendants may attain to the majestic dignity of the Egyptians, the clearness and poise of the Greeks, the magical insight into nature of the great old Chinese of Tang and Sung times — plus something peculiar and Californian of their own: in all, a richness and beauty of culture of whose like history has no record. It is a long way ahead, to judge by the screaming, tearing, scrading ugliness of our present life; but there is promise of it. Such thoughts are borne in upon one at the San Diego Exposition; and therein, perhaps, lies its greatest value. The present writer must confess that he beheld in the exhibit from the Theosophical Headquarters at Point Loma, the core and

assurance of this promise; because nothing but the vigorous spirituality, the fundamental spiritual ideas, of Theosophy, can act as the leaven to bring California life up to its high possibilities.

When the idea was first broached of holding an Exposition in San Diego to commemorate the opening of the Panama Canal, Madame Tingley was among the first to give it support. Madame Tingley not only heartily endorsed the plan, but also gave it financial support. Adding her congratulations to those of others at the success of the opening, Madame Tingley sent the following telegram to the President of the Exposition.

Point Loma, California, January 1, 1915.

Mr. G. A. Davidson, President,
Panama-California Exposition,
San Diego, California.

Permit me to congratulate the Promoters, the Directors, the Officers, all of the Craftsmen and the Citizens of San Diego for the great achievement and splendid success of the Panama-California Exposition.

The establishment of the State and other permanent buildings and what they mean to the educational life of Southern California in general and to this community in particular is a promising augury for the future.

And the great open-air organ is a wonderful feature which must inspire all who hear it. The Exposition and the City are to be especially congratulated on Mr. Spreckel's generosity. Beyond all question the Exposition is an assured success for 1915.

(Signed) Katherine Tingley.

The following is the reply which Madame Tingley received in response to the above.

San Diego, California, January 2, 1915.

Your kind telegram of congratulations is deeply appreciated and the receipt of such spontaneous tribute as yours makes the Exposition officials feel that their labors have not been in vain. Best wishes for a prosperous New Year.

(Signed) G. A. Davidson, President.

The Theosophical Bureau at the Exposition is located in the Science and Education Building, next to the archaeological exhibit. It is like a bit of Lomaland transported to the Exposition Grounds. One of the features which attracts most attention is the paintings which Madame Tingley has loaned for the occasion from her Lomaland collection. These include three of the symbolic paintings of Mr. R. Machell, former member of the Royal Society of British Artists, and now one of the directors of the Râja-Yoga College. These pictures,

entitled *The Path, 'Tis Love that Makes the World go Round,* and *Parsifal,* have a wonderful coloring, while their symbolism, particularly that of the first named, draws one's gaze to them again and again.

Of a totally different character, but equally demanding attention, are the beautiful flower studies by Miss Edith White, one of Southern California's most noted flower artists. Miss White is also one of the art directors at the Râja-Yoga College.

There are also noteworthy pictures by Mr. Maurice Braun and Mr. Leonard Lester. Mr. Braun has for many years been exhibiting at the National Academy of Design, New York, and in the other large picture galleries throughout the country. In a masterly way Mr. Braun has put into his pictures, which are mainly landscape studies of Southern California, the sparkling atmosphere and brilliant sunshine that are so characteristic of this favored spot, and which so few artists have succeeded in catching.

Mr. Lester's work is represented by one painting of San Juan Hill, Cuba. This beautiful spot was purchased by Madame Tingley several years ago as a possible site for a Râja-Yoga College, and has since been laid out as a beautiful park. No attempt has been made to have a picture gallery, but the paintings just referred to have been loaned from Madame Tingley's collection to enhance the beauty of the Theosophical exhibit.

Here is also an exhibit of literature, the product of the Aryan Theosophical Press, which it is interesting to note received for its exhibit of Printing and Graphic Arts the gold prize at the Leipzic Exposition held from May to October, 1914. However, it is impossible to give any adequate idea of the work that is being carried on there. To do this one must visit and see for himself the International Theosophical Headquarters in their own beautiful setting at Lomaland. Here in a sense is a permanent exposition, and the many thousands of visitors who attend the Panama-California Exposition in San Diego will do well to include the International Theosophical Headquarters at Point Loma as one of the points of interest not to be missed.

No description of the Panama-California Exposition would be complete without mention of the splendid open-air Organ, the gift of Mr. John D. Spreckels, one of San Diego's leading citizens, and of his brother, Mr. A. B. Spreckels, of San Francisco. The tone of the organ is magnificent, and the Exposition is indeed to be congratulated on having such a superb instrument. One of the prettiest sights

of the whole Exposition is the hundreds of pigeons in the Prado. On seeing them one's thoughts turn naturally to one of the most beautiful sights in Europe, the pigeons in St. Mark's Square in Venice. Except for the fact that the surrounding buildings are different one might imagine oneself in that old-world city.

Then, too, for both beauty and interest the Japanese exhibit and the rooms devoted to Indian life, ancient and recent, on this continent, should have special mention. Of the antiquities from Central America, we should say the most valuable feature of the whole Exposition, nothing need be said here save that their intrinsic educational value, and the method of their arrangement etc., are beyond praise. An article from the pen of Dr. Edgar Hewett, the Curator of this section, appears in this number of the THE THEOSOPHICAL PATH. Then no one should miss seeing the Taos Pueblo in the Painted Desert, and the Indians themselves in their own surroundings.

Altogether it is a great achievement for a city the size of San Diego; it would be a great achievement even in a city of the first rank. There is much that is beautiful, much that is interesting, to be seen.

Other views of the Exposition, and additional notes will be published in future issues of THE THEOSOPHICAL PATH.

IN a recent remarkable address to the American Mathematical Society the speaker concluded by saying: "There was a time . . . when to speak of indestructible energy would have been rash. It was a glorious epoch when she first appeared in the full dignity of her conservative and infinite continuity. In contrast with this, the energy of the present day is scarcely recognizable. Not only has she possessed herself of inertia, but with ever stronger insistance she is usurping the atomic structure once believed to be among the very insignia of matter. Contemporaneously, matter itself, the massive, the indestructible, endowed by Lavoisier with a sort of physical immortality, *recedes ever more into the background among the shades of velocity and acceleration.*"

Confessedly, then, the science of physics now moves among shadows and abstractions, while yet proclaiming that metaphysics lies beyond the purview of science! One may recall the words of Tyndall: "The first marshaling of the atoms, on which all subsequent action depends, baffles a keener power than that of the microscope. . . . Through the pure excess of complexity, and long before observation can have any voice in the matter, the most highly trained intellect, the most refined and disciplined imagination, *retires in bewilderment from the contemplation of the problem.* We are struck dumb by an astonishment which no microscope can relieve, doubting whether we possess the intellectual elements which will enable us to grapple with the ultimate structural energies of nature." J.

FRIENDS IN COUNSEL

A STUDY OF THE THEOSOPHICAL MANUAL NO. XII VOL. I

by H. A. Hentsch

THE duality of man's nature is one of the primary teachings of Theosophy, but the study of this duality is bewildering rather than illuminating if we for a moment lose sight of the fact that man is a divine being.

H. P. Blavatsky writes:

> Let us study man; but if we separate him for one moment from the universal whole, or view him in isolation, from a single aspect, apart from the Heavenly Man, we shall either land in black magic or fail most ingloriously in our attempt.

It is at all times necessary for the student to stress and emphasize this teaching of H. P. Blavatsky. The trend of modern thought is emphatically towards the identification of man with his lower nature — or with some aspect or aspects of it. Both theology and science emphasize the idea. The race-consciousness is saturated with it. Hence it is difficult to "break the molds of mind"; and unless we are ceaselessly on guard our thinking will constantly tend to assimilate itself to that of our nation and race.

This tendency finds frequent expression amongst students. Mostly we admit our own divinity — as an abstract proposition; at other times we go so far as to admit that there is a spiritual something within us — with which, aeons hence, we may perhaps assimilate ourselves. But our mental eccentricities generally find full expression when we attempt an analysis of man's make-up. The particular results vary from time to time. Sometimes we conceive ourselves as a congeries of beings; in this state we have (or think we have) various *possessions;* "A Higher Self," "A reincarnating Ego," "A human Soul," an "Animal Soul" — and so forth. At other times we conceive ourselves as some particular aspect of this occult managerie; we are, for the time being, "Manas," "the Lower Manas" — and so on; it varies with the mood of the moment.

Yet the teachings of Theosophy are perfectly clear and they neither vary nor involve any self-contradiction. Man is — quite literally — a part of the one Eternal Life. He always was; he always will be.

> Have perseverance as one who doth for evermore endure. Thy shadows live and vanish; that which in thee shall live forever, that which in thee *knows,* for it is knowledge, is not of fleeting life: it is the Man that was, that is, and will be, for whom the hour shall never strike.

This, and no other, is the Man.

Knowledge of our own duality is spiritual knowledge; and in pursuing this study we are studying not merely our own duality, but also the means by which we may arouse in mankind generally a knowledge of human duality. How is this to be accomplished? Is not the knowledge of our own divinity a pre-requisite for the task? Katherine Tingley says:

The knowledge that we are divine gives the power to overcome all obstacles.

And speaking of spiritual knowledge she says:

We have been trained so long on lines of false education that our very blood is teeming with its poison. It is in the very atmosphere of our breathing life. It is all around us, and our brain-minds are so permeated with the false teachings of the age that we imagine it is difficult to take up our simple possibilities, grand as they are, and to feel that we can actually have spiritual knowledge that shall reveal all things — all the secrets of life. Under the pressure of this urge and the consciousness of this power, the Law is revealed, and the closed memories of the past are opened to us. We shall not only look backward into the past but forward into the mighty future, and when this moment comes in all its joyous fullness it will require all our will — ALL our will — to hold ourselves in and not reveal too soon the secrets of our discovery.

We read in *Light on the Path:*

To all who are seriously interested in occultism I say first — take knowledge. To him who hath shall be given. It is useless to wait for it. The want of time will close before you, and in later days you will remain unborn without power.

And again we read:

Intuition . . . is a faculty which indwells in the soul, which is inherent. The would-be disciple has to arouse himself to the consciousness of it by a fierce and resolute and indomitable effort of the will. I use the word indomitable for a special reason. Only he who is indomitable, who cannot be dominated, who knows he has to play the lord over men, over facts, over all things save his own divinity, can arouse this faculty. "With faith all things are possible." The sceptical laugh at faith and pride themselves on its absence from their own minds. The truth is that faith is a great engine, an enormous power, which in fact can accomplish all things. For it is the covenant or engagement between man's divine part and his lesser self.

The use of this engine is quite necessary in order to obtain intuitive knowledge; for unless a man believes such knowledge exists within himself how can he claim and use it?

In the concluding pages of the above Manual we read:

There is a slowly growing body of men on earth who have pledged themselves

to the light to work without pause for human welfare. To the world at large they are not so known, though some of them, of various grades of progress, live and work in the common life. Their progress lies in the evolution of faculties and powers, which, though latent in all men, are as yet not generally believed in, and of whose application in human service it would therefore be useless to speak. Their body has been in existence for many ages, and those who have fully entered its membership return to it with each rebirth. . . H. P. Blavatsky and her successors W. Q. Judge and Katherine Tingley are of this body and in pursuance of its work founded and sustained the Universal Brotherhood and Theosophical Society.

We must each of us judge for ourselves what is our own relationship to the body in question; but it is pertinent in this connexion to cite the following from an address by Katherine Tingley to her students throughout the world:

Comrades, difficult as it must be for you to believe what I say, yet it is true that the Kingdom of Heaven is nearer at hand than you can realize, and that all the storms, trials, and sorrows that we now see raging in human life are but indications of the passing away of the old order of things. All that we have to do is to seize our opportunities, do faithfully our duties as they lie before us, ingrain in the very atmosphere in which we live the finer vibrations of the Higher Law, study and work, work and study.

Let us no longer crucify the Christ in ourselves! Bid Him come forth and enter upon his noble work *now*, for the woes of humanity are great! Say ye not Comrades: It shall be done! Well do we know our own lower natures have too long kept the doors of the sanctuary closed, *and the light shut in.* Well do we know, because we have failed in doing our part, that the world cries out in pain and demands of us that we pay our debts, and that quickly, lest we be shut in for ages before like opportunities present themselves.

KNOWLEDGE of Karma gives the conviction that . . . man need not accuse Heaven and the gods, Fates and Providence, of the apparent injustice that reigns in the midst of humanity. But let him rather remember and repeat this bit of Grecian wisdom, which warns man to forbear accusing *That* which

> Just, though mysterious, leads us on unerring
> Through ways unmarked from guilt to punishment. . . .

—which are now the ways and the highroad on which move onward the great European nations. The Western Aryans had, every nation and tribe, like their Eastern brethren of the Fifth Race, their Golden and their Iron ages, their period of comparative irresponsibility, or the Satya age of purity, while now, several of them have reached their Iron Age, the *Kali Yuga,* an age BLACK WITH HORRORS.— *The Secret Doctrine,* i, 644 (written 1887)

ON THE OTHER SIDE: by Stanley Fitzpatrick

CHAPTER V

A Proposal

MRS. VINING, seated alone at the lunch table, rang the bell with some impatience. A trim maid duly appeared.

"Go upstairs, Lucy, and tell Miss Vining that lunch is served."

"Yes, Madame," said Lucy, melting away between the folds of the portière.

Presently Florence Vining appeared, and with a slight gesture of greeting took her place at the table. The meal proceeded in silence, which the mother was the first to break.

"What a crush the reception was last night. Did you find it enjoyable?"

"Not particularly so; you know I do not care to be one of a crowd."

"Perhaps not, but there were many people there worth meeting."

"I met few whom I thought at all interesting."

"Mr. Vandervert is surely worth meeting," replied Mrs. Vining. "He was very attentive to you; so much so that many remarked it."

"Oh, he was as tiresome as usual."

"How can you speak so, Florence? The impression is very general that you and he are already engaged. Several said as much to me."

"Then I hope, mother, that you dissipated that impression; for it is utterly groundless."

"I made no such attempt, Florence. Why should I? If he has not yet he surely will propose."

"No, mother; I hope he never will —"

"What do you mean? You will accept him?"

"No, I will not," said Florence, with flushing cheeks and sparkling eyes. "I have told you, mother, often, that his attentions were not agreeable."

"He was near you all last evening; and you seemed pleased enough."

"I was not; but how could I avoid him?"

Mrs. Vining regarded her plate in silence. "Is Mr. Vandervert calling here today?" she inquired.

"No, mother."

"No?" she repeated, lifting her eyebrows.

"I asked him not to come."

"You *asked* him not to call today? Then you *are* engaged but wish to keep it quiet for awhile. I think openness is safer."

"We are *not* engaged, mother," cried Florence desperately, and feeling that she had been indiscreet in saying so much.

Mrs. Vining studied her daughter's face for a few moments and then a thought dawned in her mind that caused her to sit up stiff and straight with a little gasp.

"Florence," she cried sharply, "you have not refused him?"

The girl was silent, her fingers trembling as she nervously folded and unfolded her napkin.

"Well, can't you speak?" asked her mother.

"What do you wish me to say?"

"You know well enough what I *don't* wish you to say. Did Mr. Vandervert propose to you last night?"

Suddenly Florence looked up and met her mother's eyes steadily. "Yes, mother," she replied, "he did."

"And do you mean to tell me you were insane enough to refuse him?"

"I could do nothing else, mother."

"You could; you could have accepted the offer. Have you *no* regard for me? I never could have believed that my own child would have been so selfish and inconsiderate."

"O mother!" pleaded the girl, "but you do not seem to consider what it means to me at all."

"You know how much it means to me," her mother replied. "To you it means everything that a woman could desire: the best position in society, fashion, wealth; every luxury that the earth affords would be yours."

"Yes," said the girl bitterly. "Everything but happiness and self-respect."

"Happiness! I do not know what your idea of happiness can be; but this I do know, that money is the one thing absolutely indispensable, and this is the thing you are so foolishly rejecting. Neither can I see how you could lose your self-respect by marrying a man who has an unlimited supply."

"But I do not like the man himself, mother,"

"Silly sentimentalism! Too much fondness is not desirable and is often the cause of jealousies and unhappiness."

"I could not possibly marry a man I did not care for," said Florence wearily.

"But what are we to do?" cried her mother. "As you know, my annuity is scarcely enough for the two of us; and at my death it ceases entirely. Then if you are not married you would be left penniless. I have brought you up and educated you carefully with the sole hope of seeing you make a good marriage."

"I wish instead that you had brought me up to earn my own living."

"What ingratitude! What a disappointment you are to me, Florence."

"I am not ungrateful, and I am sorry to disappoint you, mother."

"Then how can you refuse to accede to my wishes in this matter?"

"O mother, how can you ask me to sell myself for money? The very thought of it is horrible to me. It is wrong — it is immoral."

"Where did you pick up such ideas? No such thoughts should enter the mind of an innocent young girl. When I was young, girls did not concern themselves with such questions; they were content to obey their elders."

"And then awaken to a lifetime of misery and degradation. Girls are wiser in this generation; they do and ought to think of what so nearly concerns themselves. They ought to consider the future, the welfare of their children and of the race."

"How unmaidenly! Think of a young girl not even engaged talking about her children! To me it seems so — so indelicate."

"Why should it, mother? Somebody must consider these things; every one ought to do so."

"Let the married do it then."

"But you will not consider these things for me; and after marriage it will be too late. No, it is before marriage that both young men and young women should consider the kind of fathers and mothers they wish to give their children."

"Florence, you positively shock me."

"I am sorry, mother, but I only speak as I think."

"But you give no reason for your rejection of a brilliant offer of marriage."

"Every word I have uttered is a reason. I could say much more than I have already said if it would not shock you too much."

"Oh don't! After what I have heard, I think I could bear anything. Is there any more about your consideration of your future children?"

"Yes, there is much more. But it's no use talking; we should never come to any understanding."

"Well, Florence, I do wish you could only think and act as other girls of your station in life do."

Florence made no reply. She had long ago learned how useless it was to argue any point with her mother, and how persistently she would, in spite of every reason, come back to her first position. After a short silence Mrs. Vining said:

"We are going to the Furgussons' tonight you know."

"I am not going," replied the girl.

"But you must; I have accepted for you."

"I wish you had not, mother, I told you I did not intend to go there."

"Is there any other reasonable thing you intend to do?"

"It is not reasonable to go there. We were only asked at the last moment because some one else failed them. You despise them as much as I do."

"I do not like them, certainly. But it is the thing to be in their set. We are sure to meet people there whom it is well to know."

"Oh mother," said Florence, rising wearily, "I've heard nothing all my life but planning and scheming for social advancement. I am so tired of it all. Why cannot people choose the few friends they really like, live their own lives, be themselves without troubling about this society muddle?"

"As I see it you are the only one making any muddle."

"Well, mother, I cannot help it."

"You mean you won't help it. Ada Furgusson would give anything to obtain your chance with Adolph Vandervert."

"I only wish he'd take her and leave me alone. He'll be there, I suppose."

"And you will not. Nothing could serve the plans of Ada and her mother better. Will you go?"

"No, mother. Why should I go where you yourself say I am not wanted? I hope they'll all be happy."

"What excuse shall I make for you?"

"Tell them the truth. It might do them good to hear it for once in their lives."

"How impossible you are, Florence. What will you do this evening?"

"I am going to Mrs. Weitman's."

"What can you see in that uninteresting invalid? Her conversation bores me to death."

"It does not bore me; I like it. Hylma Desmond will be there and I have not seen her since her return from Europe."

"I do not like you to be with that set," said Mrs. Vinning. "You are queer enough now and I fear you will be taking up all their foolish fads."

"But they are more than foolish fads, I know," mused Florence as her mother left the room.

(To be continued)

At a meeting of the American Association for the Advancement of Science recently, the President said: "A few years ago the possibility of investigating by direct experiment the internal structure of atoms, or the topographical grouping of hereditary units in the germ-cells, would have seemed a wild dream. To-day these questions stand among the substantial realities of scientific inquiry. And lest we should lose our heads amid advances so sweeping, the principles that guide scientific research have been subjected as never before to critical examination. We have become more circumspect in our attitude towards natural "laws." We have attained to a clearer view of our working hypotheses — of their uses and their limitations. With the best of intentions we do not always succeed in keeping them clear of metaphysics, but at least we have learned to try. We perceive more and more clearly that science does not deal with ultimate problems or with final solutions. . . .

"And after all, science impresses us by something more than the cold light of her latest facts and formulas. The drama of progress, whether displayed in the evolution of living things or in man's age-long struggle to comprehend the world of which he is a product, stirs the imagination by a warmer appeal. Without it we should miss something that we fain would keep — something, one may suspect, that has played an important part at the higher levels of scientific achievement."

True — where there is no enthusiasm, science perishes. We welcome the signs, visible on almost every hand, that science is becoming more generous in its attitude towards the problems of Man and Nature, although it has not yet learned to look whole-heartedly into the more advanced and far-reaching analysis of such problems, brought before the world by H. P. Blavatsky. D.