THE ENIGMA OF SCIENCE

BY WALTER B. LYDENBERG

ALTHOUGH the enigma of science has been a stumbling-block for thinkers in all ages, no attempt at an exhaustive study of the subject was undertaken until as late as the eighteenth century, when, after twelve years of research, Immanuel Kant brought forth his memorable *Critique of Pure Reason*. He introduces the enigma to us in the opening sentences of the preface to the first edition of that work, thus:

"Human reason, in one sphere of its cognition, is called upon to consider questions which it can not decline, as they are presented by its own nature, but which it can not answer, as they transcend every faculty of the mind.

"It falls into this difficulty without any fault of its own. It begins with principles, which can not be dispensed with in the field of experience, and the truth and sufficiency of which are, at the same time, insured by experience. With these principles it rises, in obedience to the laws of its own nature, to ever higher and more remote conditions. But it quickly discovers that, in this way, its labors must remain ever incomplete, because new questions never cease to present themselves; and thus it finds itself compelled to have recourse to principles which transcend the region of experience, while they are regarded by common sense without distrust. It thus falls into confusion and contradictions, from which it conjectures the presence of latent errors, which, however, it is unable to discover, because the principles it employs, transcending the limits of experience, can not be tested by that criterion. The arena of these endless contests is called metaphysics."

Here we have what is perhaps the most searching indictment against human intelligence that has been issued. It excludes the possibility of an understanding being reached concerning certain phenomena. The limitations of man's intelligence was however not a discovery of Kant's,—he simply wrote up the indictment in a manner sufficiently formal to meet the demands of science and philosophy; but throughout literature, ancient and modern, we find the difficulty sensed. It was the consciousness of this limitation of the intellect which stirred the heart of Bildad the Shuhite to remind his perplexed and tortured friend Job that "we are but of yesterday, and know nothing." The Psalmist, contemplating in awe the superintelligence of his Creator, could not help but exclaim, "Such knowledge is too wonderful for me; it is high, I can not attain unto it." With perhaps less feeling the cold intellect of Plato came to admit that "the learning and knowledge that we have is at the most but little compared with that of which we are ignorant." The doubting Thomas, in his child-like simplicity, could not but confess, as he laid the stupendous problem at the feet of his Master, "Lord, we know not whither thou goeth; how know we the way?" (while to that question Jesus furnished an answer that has remained unchallenged even until this day). On the plains of Naishapur the scientist-poet Omar the Tent-maker reminiscently sang:

"Myself when young did eagerly frequent Doctor and Saint, and heard great argument About it and about: but evermore Came out by the same door where in I went.

"With them the seed of Wisdom did I sow. And with mine own hand wrought to make it grow: And this was all the Harvest that I reap'd— 'I came like Water, and like Wind I go'."

While a little later that other poet Dante as, in his fancy, he trod the mountain-paths of Purgatory is cautioned by his guide Virgil:

> "Seek not the wherefore, race of human kind; Could ye have seen the whole, no need had been For Mary to bring forth. Moreover, ye Have seen such men desiring fruitlessly; To whose desires, repose would have been given, That now but serve them for eternal grief. I speak of Plato, and the Stagirite, And others many more."

We all remember "Doctor Faust," how Goethe introduces him to us, learned as he is, thus:

"And here I am at last, a very fool, With useless learning curst, No wiser than at first!"

Prior despondently sums it up, "Human science is uncertain guess";

and Lord Greville, "Human knowledge is the parent of doubt"; and Oliver Wendell Holmes, "Science is the topography of ignorance"; and Byron, with a sneer, "Science is but an exchange of ignorance for that which is another kind of ignorance"; and Shakespeare, not mincing words, impatiently dismisses it all with the exclamation, "O this learning, what a thing it is!"

Returning to writers of scientific or philosophic bent who have discussed the subject in a formal manner, we find explicit statements made by Henri Poincaré and by George Henry Lewis. The former writes: "No particular law will ever be more than approximate and probable. Scientists have never failed to recognize this truth; only they believe, right or wrong, that every law may be replaced by another closer and more probable, that this new law will itself be only provisional, but that the same movement can continue indefinitely, so that science in progressing will possess laws more and more probable. . . . Every law is only a statement, imperfect and provisional, but it must one day be replaced by another, a superior law, of which it is only a crude image." The statement from Mr. Lewis is as follows: "Nothing is more clearly demonstrable than that what is called exact science is also a purely ideal construction, dealing primarily with abstractions, and not with concrete realities. . . . A traditional perversion makes the essence of a thing to consist in the relations of that thing to something unknown, unknowable, rather than its relations to a known or knowable-i. e., assumes that the thing can not be what it is to us and other known things; but must be something 'in itself,' unrelated, or having quite other relations to other unknowable things."

Notwithstanding these warnings, the allurements of science, with its admittedly vast strides in the advancement of knowledge, seem to be so entrancing that we find its devotees making bold to occupy that stage in the arena of metaphysics forbidden by Kant, though not indeed without rushing pell-mell into that very "confusion and contradictions" about which he issued the warning. Thus Mr. Albert Edward Wiggam, in a letter to the editor of *The Century Magazine*, published in the February, 1923, number of that periodical, regards the onslaughts of present-day science in the field of the philosopher somewhat with dismay and trembling. Indeed, civilization itself, in his opinion, is in danger of disintegration at the hands of philosophy when consideration is given, as must needs be, to the discoveries of modern science. A formidable "generation of philosophers has arisen," he says, "schooled in psychology, biology, chemistry, and

physics." With the breaking down of "barrier after barrier of the unknown . . . under the onslaughts of critical observation and experience." one professor of philosophy seems now to be imbued with the obligation of teaching his students "that 'man is a mere cosmic accident,' the most interesting and the most self-interested accident which has yet happened to matter, but nevertheless an accident ; that 'immortality is a sheer illusion,' and that 'there is practically no evidence for the existence of God'." Another professor of philosophy, according to Mr. Wiggam, considers himself bound to caution his students, "many of them labor leaders and intellectuals of the most earnest type, that 'religion is a mere defense mechanism' which man has built up subjectively, a 'compensatory fiction for his inner feeling of inferiority.' 'a device for importing symbols into the world of fact,' all with a view not of finding reality, but of keeping up his courage with a 'picture of a universe run in his private interest,' 'a universe as he would like to have it'." Another professor of philosophy seems constrained to announce that 'freedom of the will has been knocked into a cocked hat,' and that such things as the 'soul' and 'consciousness' are mere mistakes of the older psychology." Mr. Wiggam expresses the opinion that "a majority of all biologists, psychologists, physicists, and chemists are thoroughgoing mechanists, and that mechanism as a world view is growing." Now the danger to civilization is this, in Mr. Wiggam's opinion: "What is the man-on-the-street going to do when he wakes up to what they [the philosophers] at least believe are the facts?" The philosophers themselves, according to Mr. Wiggam, are not inappreciative of the situation, and answer the question "candidly that they do not know. They express only hopes, suggestions, and despairs." "The highest intellectual triumphs of man," Mr. Wiggam fears, "have failed to furnish him [the man-on-the-street] with any sound or satisfying reason for living at all."

Briefly, Mr. Wiggam's estimate seems to be, that philosophy is a menace to civilization, and that the advance of science is at the root of the evil. What a condemnation! And, according to Mr. Wiggam, philosophers themselves are conscious of the justness of the condemnation, but clear their skirts on the ground that they are helpless in the case.

Now that Mr. Wiggam is thoroughly justified in his apprehensions, can not be denied. The condition he cites is patent. What we do deny is, that the philosophers of today are justified in attempting to adapt scientific discoveries to metaphysical problems. We deny that they are helpless properly to interpret metaphysical problems in the light of recent scientific progress. We contend that if they do not know what to do under the onslaughts of science, they should know. We charge them with professional negligence in disregarding the caution of that great teacher of philosophers Immanuel Kant. We charge them with forgetfulness, in their zeal to babble and ostensibly at least to keep up with the procession of scientific progress, of the warning issued by Kant, namely, that "the principles it [human reason in the sphere of metaphysics] employs, transcending the limits of experience, can not be tested by that criterion [experience]." The criterion of scientific truth is, above all things, the test of experience. Therefore, science as an intellectual mentor has no part whatsoever to play in the solution of metaphysical problems. Its rôle is that of "hands off." And we accuse these professors who seek to mix science with their metaphysics of an utter disregard of the enigma to which science must lead if it is induced to attempt to spill over and trench upon a field in which its feet were never made to tread.

Hand in hand with the philosophers, the scientists themselves are to blame; but to err is human; and they fall into their mistakes in this respect, in a most natural fashion. The problems of metaphysics, like our normal appetite, are with us always in the healthy state of the mind. They cry for a solution. Who therefore can withhold the bread? And when an attractive crumb is presented, it is most natural to taste.

In diagnosing this confusion into which human reason falls, even as Mr. Wiggam has pointed out, Kant found it guilty of employing "principles which transcend the region of experience." To prescribe a treatment of the malady, naturally we must probe to find out the nature of these experience-transcending principles; and a journey into Kant's Critique is the first indication. Without attempting here to tread that labyrinthian maze, we will content ourselves with a few bold flank attacks, and, daringly plunging into the vitals of the Critique, snatch up what appear to be the most promising jewels, and forthwith retreat. What have we? It is this: that everything we know is known only as existing in time and space and as having quantity attributes, quality, a relationship to something else, and as having a necessary and certain existence. Another startling disclosure of Kant's is this: that the contradictory ideas that the total of things had a beginning in time and is also limited in space, and that the total of things had no beginning in time and has no limits in space, are both tenable; that the contradictory ideas that everything consists of simple parts and that there is nothing that is not composed of parts, and that nothing consists of simple parts and that there is no simple substance, are likewise both tenable; that the contradictory ideas that a causality of freedom is necessary to account for phenomena, and that there is no such thing as absolute freedom, are also both tenable; and finally, that the contradictory ideas that there is an absolutely necessary being as the cause of all things, and no absolutely necessary being exists as the cause of all things, are similarly both tenable. These four sets of contradictory ideas Kant styled the "antinomies of pure reason."

Well, here at least we have some subjects for our debating societies. As to what this all means, we will offer no suggestions. The confusion and contradictions which Kant has pointed out are however matters that can not be frivolously dismissed. He has at least given us food for thought; and to attempt to prove that he is in error in his contentions is a job which we will gladly relinquish to any who are desirous of tackling it.

Perchance Mr. Lewis has diagnosed the cause of this philosophical thorn-in-the-flesh in a more easily understandable fashion. He considers that the malady is all due to the fact that what is called exact science deals "primarily with abstractions, and not with concrete realities." We therefore simply want to ask here if these things which Mr. Wiggam's philosophers are talking about are not after all mere "abstractions" and not in any sense of the word such "concrete realities" as are applicable to treatment by scientific methods, and wholly without the range of practical scientific inquiry and hopelessly uninvulsive in that range.

Examining, then, the fears of Mr. Wiggam's philosophers in the light of the conclusions reached by Kant and by Lewis, what do we find?

In the first place, what after all has science to do with man? It can gain and record experiences with this man or that man or with ten thousand particular men with regard to their physical and mental phenomena; and it can suggest the probable physical and mental makeup of certain men who probably lived 50,000 years ago as represented by their fossil remains; and it can suggest the probable physical and mental makeup of animals now extinct but whose fossil remains indicate the one-time existence of a creature resembling both present-day men and present-day apes; and similarly it can suggest the probable appearance of the "ancestors" of apes, and in turn their "ancestors," and so on down the line. The thing man, however, is not this man or that man or those men, but is a distinct something abstracted from all men and representative of the attributes of all possible men who now exist or may exist or ever did exist. Man is the abstraction ; this man and that man and those men are the concrete realities. Man is the fiction of the intellect; that man, a concrete reality. The former is an idea; the latter are particular things presented to us and available for study, for observation, for experience with. Surely no scientist can hope to solve the problems presented by imagination, the abstract thing, by methods of study applicable only to concrete realities. If he should so endeavor, he must needs relinquish scientific methods for metaphysical methods. Man is I and you and an unthinkable number of other I's and you's all lumped together and thrown by the imagination into a single abstracted thing. The statement therefore that "man is a cosmic accident" is a guess, a possibility, a fiction, a fancy, wholly without scientific justification. An idea of similar import to be stated as a scientific truth must be in the form "all men have been found to be cosmic accidents," which is preposterous. The "descent" of "man," therefore, in Darwin's book so entitled, is no less a myth than the "creation" of "man" in the Pentateuch; the writers of both books were biologists; but the facilities for observation possessed by Darwin were infinitely greater than those of his ancient predecessor, and as a result his book contains voluminous facts of extraordinarv interest.

Further, what has science to do with the cosmos or with accidents? Both of these ideas are abstractions and not concrete realities. It is indeed possible to fancy, as Mr. Wiggam's philosophers seem to do, that there is such a thing as a cosmos, and that in the course of helpless events in this cosmos the existence of men has come about, but to stamp such a fancy with scientific approval is, to say the least, to make a travesty of the name of science. I have yet to see the scientist who has convinced me that I am "a mere cosmic accident," for the reasons that I fail to find in science a solution of the problem of myself and also a concrete representation of a thing that can be called a cosmos and also even any attempt at explaining just what an accident is. Kant once and for all eliminated the ideas of accident and necessity from the sphere of common sense, in his fourth antinomy, which we have above paraphrased for our readers in the brief sentence, "The contradictory ideas that there is an absolutely necessary being as the cause of all things, and no absolutely necessary being exists as the cause of all things, are both tenable."

As a matter of fact, is not an "accident" after all a veritable nightmare to the scientist? Does not his supreme glory lie in unraveling the mysterious "cause"? And to find him attempting to solve the testy problem by taking refuge under the skirts of "mere accident" is like finding a heartsick lover seeking to convince his saddened breast that the forbidden flame of his soul is after all nothing else than a bunch of "sour grapes." If man is a "cosmic accident," we confess we do not know what it means, notwithstanding the inference the statement clearly bears, that men are not the creations of a Divine Being, a negation so far beyond the scope of scientific research that it is disheartening to mention the two in the same breath.

Similarly with the other problems with which Mr. Wiggam's philosophers are concerned, it is observed that these problems deal with abstractions and not with concrete realities, amenable to scientific research. For what, after all, has science to do with immortality? Far from its being a concrete reality, we know it is only a belief. Its proof is not within the scope of science or philosophy, nor its disproof. And that it is a belief and that a philosopher may express his belief that as such it is a "sheer illusion," is but one of the many evidences that freedom of the will has not by any means "been knocked into a cocked hat," as Mr. Wiggam's philosophers aver. What man is not free to believe as he will? and the more you try to influence his belief the greater does the mystery deepen and the farther removed is even the semblance of a possible reality. An abstraction is necessarily the creation of a free will, and in this respect differs from its antithesis the concrete reality, which is of necessity given to us already made.

We protest therefore against unwarranted meanings being given to the discoveries of science when problems are involved which the scientific method can not solve and is not supposed to solve. There is no more justification for asserting that immortality is a sheer illusion because scientific evidence of immortality is not available, than there is for asserting that the spots on the sun are sheer illusions because they are not visible to the naked eye. Moreover, Kant claims that a belief in immortality is a necessity and can not be avoided any more than a belief in one's ability to get up and walk ; that the ability exists, it takes an experiment to prove, provided the problem is experimentable.

As for consciousness being a mistake of the older psychology, we know it is the *sine qua non* of all intellectual activity, whether that of the scientist, the philosopher, or the man-on-the-street. It is a concrete reality as much as a block of stone is, and accordingly is not an abstraction. It is given to us already made. It is the allimportant reality of the new psychology. To deny its existence is as unbelievably possible as to deny the existence of the page before one's eyes. To deny its existence even on the ground that it can not be apprehended through sense perception is to accord to sense perception a station of infallibility which physiology is well aware it does not possess; and if this is the doctrine of the new psychology we recommend that the new psychology devote a time to the study of physiology. Sense perception itself, be it remembered, instrument *par cxcellence* as it is of all scientific investigation, is in itself but a state of consciousness, the existence of which the new philosophy seeks to deny.

Thus having shown that the problems with which the new philosophy concerns itself are problems of abstract ideas, we wish to go a step farther and show, as Mr. Lewes has pointed out, that "what is called exact science" itself "is also a purely ideal construction, dealing primarily with abstractions, and not with concrete realities." The iron dust in the chemist's test-tube is a concrete reality. Obviously, however, exact science can get nowhere with test-tubes of iron dust or any other chemical alone; but out of these concrete realities represented by dust or other forms of the mineral, it creates the abstract idea of iron, an element. Iron is not this particular test-tube of iron dust, nor that chunk of mineral in the mine, but it is a symbol representative of the fictioned essential character of all iron-dust in all test tubes, all chunks of the mineral in all mines, and all other existences of the same thing in this earth, in the sun, in the stars, and in the beyond-the-stars—whatever that may be. In other words, for convenience sake we give it a name, and that name is "an element." Now it is in these scientifically necessary abstractions that science encounters its enigma. For after all, it goes on to tell us, there is no such thing as an element, as such; what is regarded as an element is an aggregation of atoms. And it goes on further to show that, after all, there are no such things as atoms, as such; what are regarded as atoms are aggregations of electrons and protons. Further, there are, after all, no such things as electrons and protons, as such; what are regarded as electrons are "elementary corpuscles of negative electricity" and what are regarded as protons are "elementary corpuscles of positive electricity." We naturally ask it to proceed farther and tell us what "corpuscles" are and what "electricity" is. One physicist has indeed attempted in part to do so, and offers the

suggestion that "electricity is the only known constituent of the ponderable matter of which our universe is composed." We rather think, however, that we are getting farther and farther away from "concrete realities" with this scientific method of procedure the longer we indulge in it. Indeed, if we were disposed to do so we could proceed with this scientific game of definitions all night long, and all the following day, and indeed until our brains grow weary and give up in despair. Now are we not, after all, only concretely illustrating the contention that Kant made two centuries ago, when he said, as we have quoted in opening this discussion, that "it [human reason] quickly discovers that, in this way, its labors must remain ever incomplete, because new questions never cease to present themselves"? And are we not also simply concretely illustrating the contention that Mr. Lewes made, when he said, "A traditional perversion makes the essence of a thing to consist in the relations of that thing to something unknown, unknowable, rather than its relations to a known or knowable—i. e., assumes that the thing can not be what it is to us and other things; but must be something 'in itself,' unrelated, or having quite other relations to other unknowable things"?

A similar confusion is apparent when the scientist attempts to deal with the abstractions time and space—ideas so enigmatic when a study of them is attempted but yet so basically essential and unconsciously employed in every moment of the conscious life. Kant considers them necessary forms of knowledge and not arising out of experience. In the struggle of mathematics with time and space, we find that science returns the abstractions to the psychologist for their final solution. The situation is summed up by Professor Minkowski as follows: "Time by itself and space by itself are mere shadows; they are only two aspects of a single and indivisible manner of coordinating the facts of the physical world." It is indeed difficult for a layman to understand how these two ideas which constitute the basis of all mathematical expressions of measurement with regard to concrete realities, can be mere shadows when each is considered alone, and can be wholly disregarded and in their place a single method of coordination used commonly known as the fourth dimension. Be it even so, it still remains that a manner of coordinating facts, whether naively through distinct ideas of time and space, or mathematically through a single idea of a fourth dimension, is a psychological phenomenon, an act of measuring. Now what is the mathematician's act of measuring? It is the expression of one

concrete reality in terms of another concrete reality that is eternally fixed, uniform, invariable. The nearest observed approach to au eternally fixed, uniform, invariable concrete reality is the velocity of light in a vacuum, and which indeed physics has thus far found seemingly to be independent even of the velocity of its source. Here now enter the contradictory ideas of Kant's third illustration of contradictory ideas, namely that nothing is eternally fixed in nature and that everything in nature is regulated by a cause. In other words, what basis have we for postulating that the velocity of light in a vacuum is eternally fixed, other than the results of our own observation.

We are inclined to believe that, on account of the extremely modest claims he makes for it, Professor Einstein, the champion exponent of this most recent mathematics, senses this very difficulty. Notwithstanding, many of his disciples appear to think that in this mathematics a "finality" has been reached, a sort of first and last truth beyond which no further progress can be made nor indeed is necessary to be made, it is reassuring to note the reserved manner in which he himself regards it. In the first place, he is careful to make it plain that his mathematics is based upon a "theory"-the theory of relativity. This theory, he says, is in turn based on "principles," and principles he defines as "empirically observed general properties of phenomena." Nothing is found to indicate that he considers his theory "final"; on the contrary, he says, "The great attraction of the theory is its logical consistency. If any deductions from it should prove untenable it must be given up." That the constancy of the velocity of light in a vacuum is an observed property of light is one thing; but that this property of light is a necessary property and thus a concrete reality, is not within the province of science to state. Thus it is that science begins and ends with observation; and the thing observed is as mysterious as ever. Euclid's geometry and Newton's law of gravitation remained "observed facts of the physical world" until it was shown that the "observations" of these great masters were not complete. And is not that the fate of all observation?

In view then of the existence of the enigma of science, what estimate shall we place upon that "mechanistic" view of the "universe" and of "man" which Mr. Wiggam's philosophers so devoutly preach? Can the philosophic view of these abstrcations be any more trustworthy than the scientific view of them? and the scientific view, as we have seen, can be nothing more than belief. Is not the situation the same as that sensed by Professor Huxley when, referring to the misconstruction of Darwin's doctrine of "evolution" at the hands of the scientists of his day, he said, "Science commits suicide when it adopts a creed"? The fact is, Mr. Wiggam's philosophers have allowed themselves to be carried away by a dogmatism as represensible as that of any religious intolerant. They have entrenched themselves behind the banner of "mechanism" with no less zeal than the howling dervish has planted himself behind the banner of Mohammedism. They have replaced Kant's Critique of Pure Reason with a Bid for Scientific Dogmas. If we had Cowper with us we believe he would arise and repeat his simple lines:

"Learning itself, received into a mind By nature weak, or viciously inclined, Serves but to lead philosophers astray Where children would with ease discern the way."

But what is the answer? We have encountered an enigma,what is its solution? To use the slang of the poor "man-on-thestreet," Where is *he* to "get off at"? When the doctors disagree, what is the patient to do? The answer is not hard to find. It has time and again been pointed out by the deepest students of the enigma of science. The late Prof. George Trumbull Ladd, after an exhaustive study of the subject, reached the conclusion that "any attempt to treat the truths of the religious experience of humanity by the method of philosophy can only terminate in a still imperfect condition of knowledge." The answer is, to divorce science and religion. In the words of W. H. Mallock, "If religion, then, in the face of modern knowledge, is ever to be re-established on a firm intellectual basis, this result must be brought about by a recognition of the intellectual truth that the existence of nothing in its totality can ever be grasped by the intellect." Nor do we turn in vain for an answer to Kant-to him who first uncovered the enigma for us in all its uncouth boldness. There is as certain an answer in his Critique of Practical Reason as is the enigma presented in his Critique of Pure Reason. As with Lord Bacon centuries before. Kant found the answer in religion. We know what Bacon said—"It is true, that a little philosophy inclineth man's mind to atheism, but depth in philosophy bringeth men's minds about to religion." If therefore a comparison is in order between Mr. Wiggam's philosophers on the one hand and Bacon and Kant, on the other, the conclusion is reached that the former have not yet attained the requisite depth in their

chosen branch of learning. The statement of Mr. Wiggam's philosophers that religion is a "defense mechanism," a "device for importing symbols into the world of fact," may be true; the truth they have not, however, learned is, that the "man-on-the-street" is sorely in need of a defense mechanism, and that his only defense mechanism is religion. And indeed, is science itself anything else than a "device for importing symbols into the world of fact," the world of experience? Facts and experience are used by the dog and the horse; the "symbols" are man's and science's. Moreover, the adequacy of this defense was attested to by the Hindoo Shoshee Chander Dutt when he wrote not long ago, "The universe is all illusion. One can not attain to God through the word, through the mind, or through the eve. He is only reached by him who says, 'He is'." The success of the defense was found by Job, perhaps at the dawn of written history, when, borne high above his despair on the staunch wings of hope, he could silence the skepticism of Bildad with the victorious assertion, "I know that my Redeemer liveth." And it was established once and for all when the seed of a lasting civilization was sown 1,893 years ago by Jesus of Nazareth.

Prof. Rudolph Eucken says: "Science brings forth an energetic clarification and consolidation, an ascent of man to a world consciousness and to a life which proceeds from the expansion and truth of things; but science is not able to become the sole mistress without endangering through its merely intellectual culture an excessive self-consciousness of the work of thought, and turning the tasks of life into problems of knowledge, and finally injuring the development of an independent inwardness as well as of the fresh apprehension of the immediate movement. A manly strength and a consolidation of character which the whole being needs originate out of morality." And again: "In the average of human conditions, religion has always been more of a semblance than of a reality, and what religion has performed on such a plane has been full of contradiction. But in spite of all this, religion remains a mighty power of human life and of the universal movements of mankind. For it has brought forth a new standard which makes inadequate all that previously sufficed; it has shown the evil doings of men and the limits of his valuation of things, and, along with this, it is called to create a cleft in the inmost soul itself. That great turn of religion is the raising up of new demands to the level of the spiritual life and a blotting out of what hitherto satisfied man. Thus we find it most of all in the personality and life-work of Jesus."

Let us say, then, that it is not a matter of scientific study or learning or reading or remembering; it is a matter of forgetting. It is not a mental problem; it is a mental enigma. It is doubt, and at the same time it is the faith of a child. It is not asking the question; it is keeping silent. It is not ritual and dogma; it is unheard prayer. It is hope. It is trust. It is not a complexity; it is simplicity itself. It is not thinking and wondering; it is doing. It is loyalty to one's beliefs. It is a self-forgetting interest in one's fellowmen. It is work lightened with the enigma love.

> "God 's in his heaven,— All 's right with the world!"