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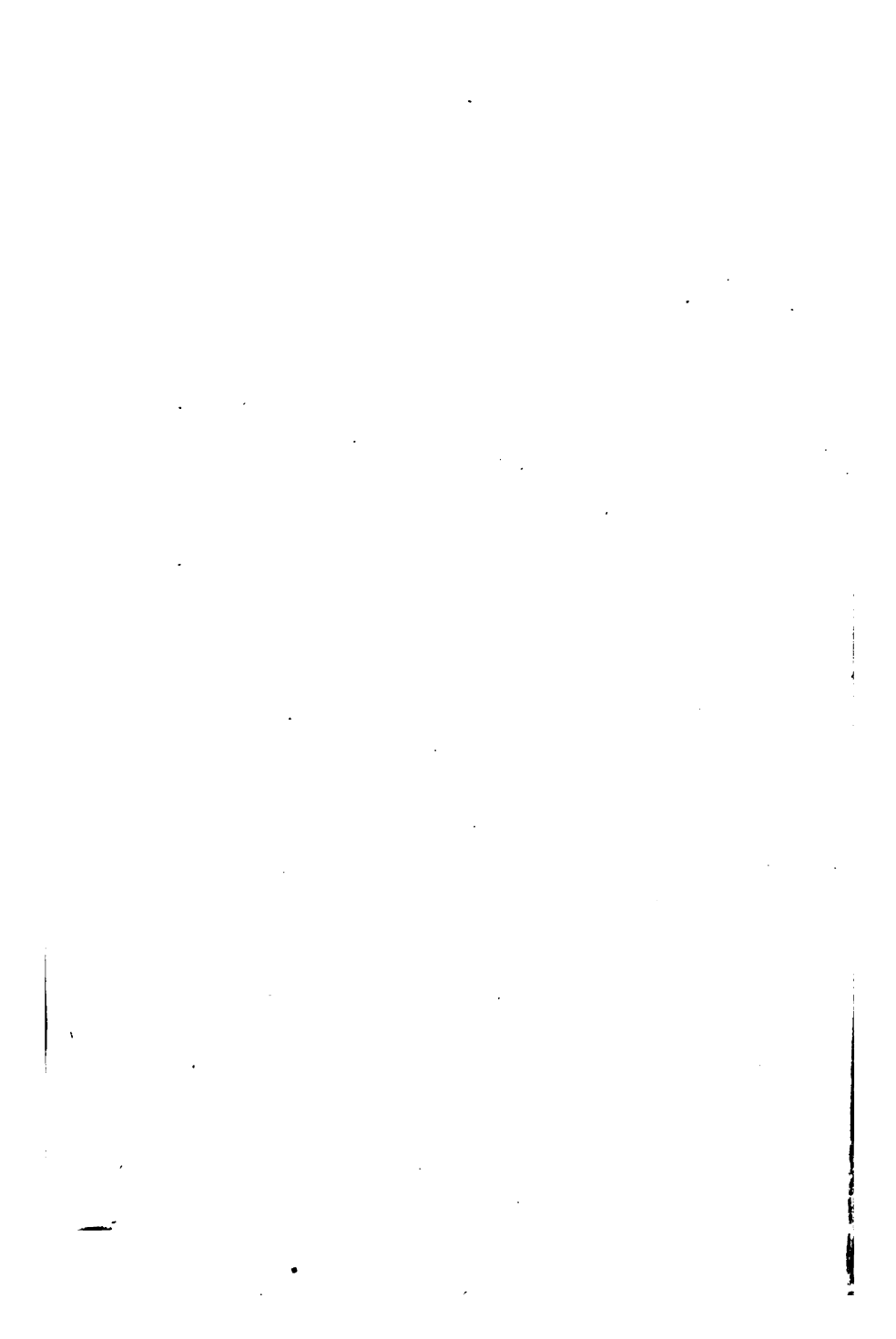
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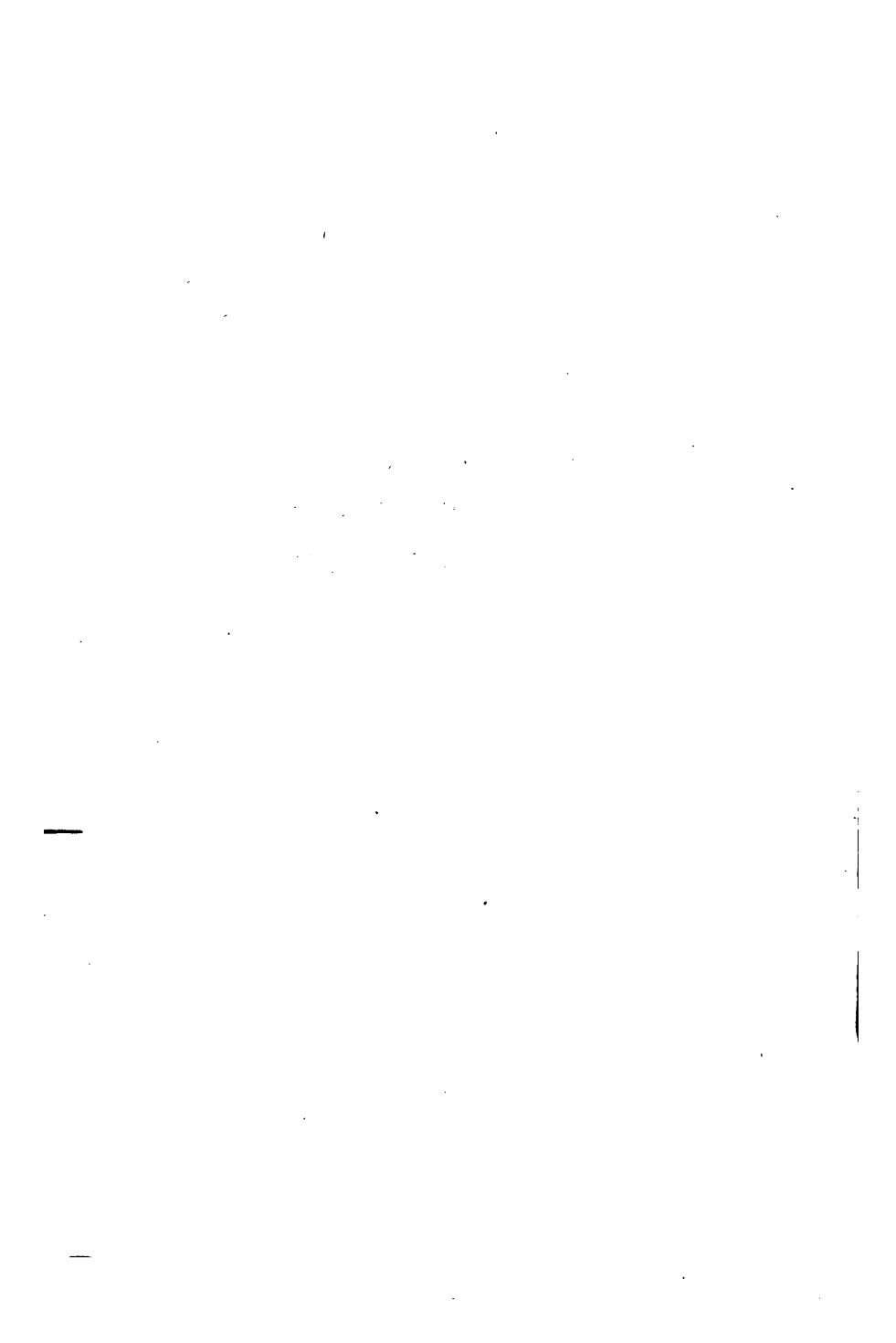
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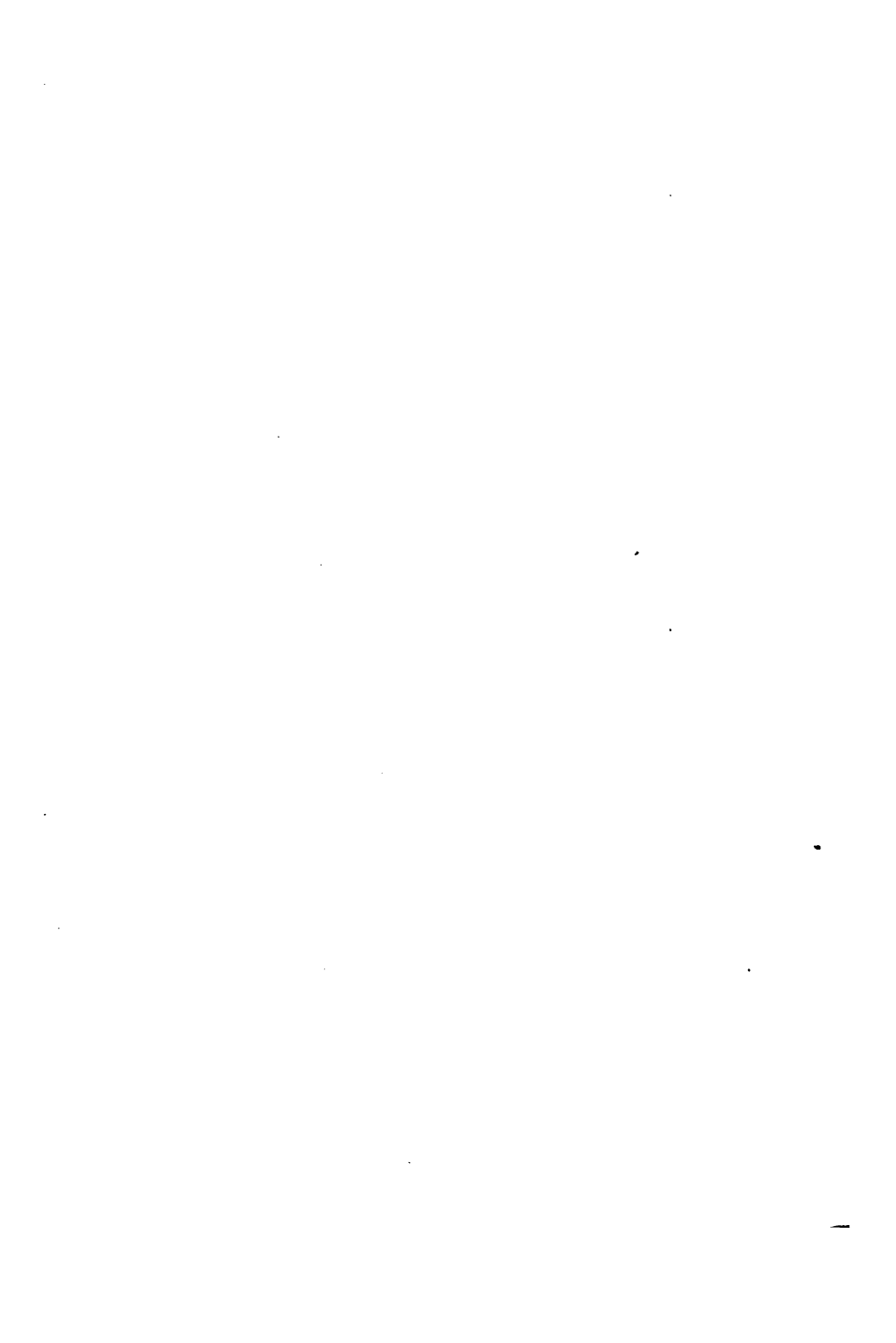
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**THE EVOLUTION OF THE SOUL
AND OTHER ESSAYS**







Yours faithfully,
Thomson Jay Pearson.

THE
EVOLUTION OF THE SOUL

And Other Essays

BY

THOMSON JAY HUDSON, PH.D., LL.D.

AUTHOR OF "THE LAW OF PSYCHIC PHENOMENA," "THE LAW OF
MENTAL MEDICINE," ETC.

WITH PORTRAIT AND BIOGRAPHICAL SKETCH

SIXTH EDITION



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Mrs. H. H. Highie
12/29/53

This book is dedicated to my father's friend, the
REVEREND CHARLES L. ARNOLD
as a slight testimonial of the affection and esteem
in which he was held by its author.

C. B. H.

PREFACE.

IN arranging the following essays and lectures for publication, their respective dates of production have been disregarded for the sake of presenting them, as far as possible, in a natural sequence. The first of the articles contains a statement of the fundamental principles of the author's hypothesis, and may be regarded as introductory to those which follow. It will be found that these principles are restated, briefly, in other parts of the book; but the repetition is due to the fact that the papers were written at considerable intervals of time, and for readers or audiences not always familiar with the author's theories. I have ventured, however, to eliminate much of the iterated matter, leaving only that which bears directly upon the subject under consideration in the article in which it occurs.

It was the author's purpose to revise his essays before their republication in the form of a collection, but his life's work ended with the last page of "The Law of Mental Medicine." The revision, however, would have resulted only in amplifying and elaborating the applications of his hypothesis. He had no changes to make in its fundamentals. During the ten years which have passed since the appearance of the first of his works on psychological subjects, no fact ever came under his observation which demanded the alteration of one of the basic ideas of his theory; and it can be said that he was not only an earnest and fearless seeker after facts, but what is better, an honest one. He found critics and opponents, but the most zealous have failed thus far to adduce a single phenomenon out of harmony with the principles laid down in his first work. Had such a phenom-

enon been presented, he would have been the first to announce the invalidity or inadequacy of those principles.

In regard to the theory of duality of the human mental organization, attention should be called to the fact that he did not insist upon a literal acceptance of the premise that man possesses two minds, but said clearly and repeatedly that it is a matter of indifference whether it be held that he has two minds, or that he has but one which is capable of manifesting itself in two distinct modes or conditions of activity or states of consciousness. He indicated the line of demarkation between the phenomena characteristic of each: he pointed out their respective functions in life, and the powers and limitations by which each is distinguished from the other, and he was content with the proposition that all observable psychic phenomena support the hypothesis of mental duality.

He did not claim to be the discoverer of a "subliminal self," of an "unconscious ego," of an "under-self," or of a "secondary consciousness," and, moreover, he recognized the plagiarism in that claim when made by others. To quote his words, "The theory of duality has been dimly floating around in the minds of various philosophers from the time when Greek philosophy ruled the intellectual world until the present age."

He accepted the hypothetical duality, just as others have done, but he did so with no disposition for dalliance and coquetry with terms, or for shuffling or evasion. He made no effort to protect his theories from assault by surrounding them with a haze of metaphysics, metaphor, or phrases in the subjunctive. He opened his front to attack, and threw down the gage.

The specific claim which should be made for the author of "The Law of Psychic Phenomena" is not, then, the hypothesis of mental duality, but the apprehension of the laws governing the action of the two minds, the delimitation of the powers and functions of each in its relation to the human organism, the perception of the inter-relation of the laws of duality and suggestion, and the formulation of the master-key which unlocks so many psychological mysteries and opens the door long barred

by ignorance and superstition: I refer to the maxim, with its corollaries, that

“The subjective mind is constantly amenable to control by the power of suggestion.”

I desire to thank the publishers of “Harper’s Magazine,” “The New York Medico-Legal Journal,” “The New York Medical Journal,” “Everybody’s Magazine,” “Success,” “The National Magazine,” “Suggestion,” “The Hypnotic Magazine,” and the editor of “Answers by Experts,” for their courtesy in permitting the use of many of these articles for publication as a collection.

C. B. H.

DETROIT, MICHIGAN,
February 1, 1904.



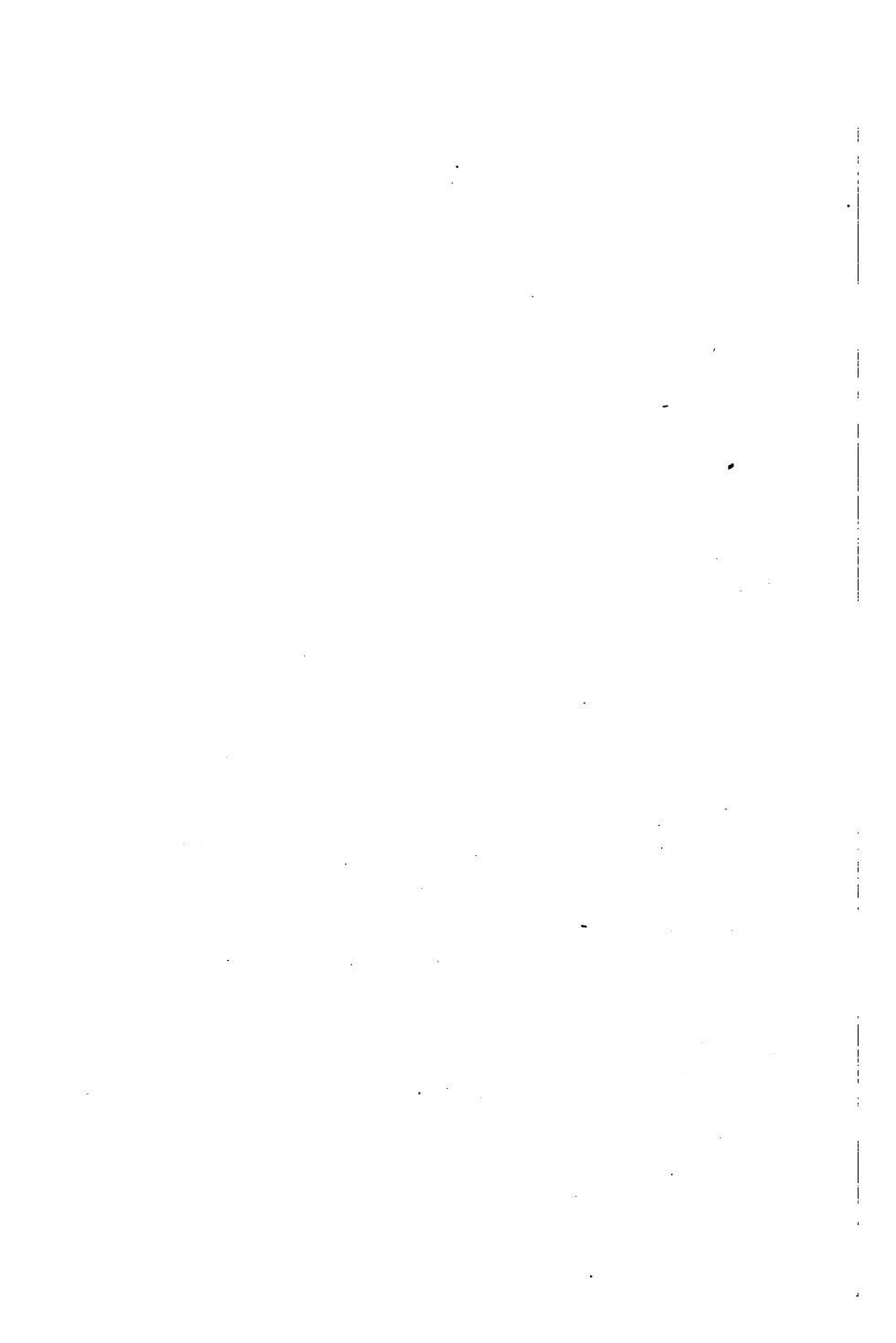
BIOGRAPHICAL

THOMSON JAY HUDSON was born at Windham, Portage County, Ohio, on the 22d day of February, 1834. His American ancestry is traced back on both sides of the house to the Colonial Period, his paternal forebear having landed at Jamestown, Virginia, with Captain John Smith in 1607, and his maternal ancestor, Governor William Bradford, at Plymouth, Massachusetts, in 1620. His early life was spent on a farm, where he bore the brunt of the hardships incident to farm life in days before agricultural machinery lightened its labors. To this, as well as to heredity on both sides of his house, he owed his robust health and iron constitution. His early education was acquired in the common schools of his neighborhood, and at an academy in a neighboring town. It was here that some of the characteristics of his adult life first asserted themselves. He refused to be bound by precedent or to submit to authority in the matter of his education; while he followed the prescribed course faithfully, he insisted on adding such studies as he deemed valuable. For instance, he surprised his common-school teacher on one occasion by announcing his intention to study Natural Philosophy, Chemistry, and Logic, then and there. It is said, however, that young Hudson was aided and abetted in his scheme of private education by a learned uncle, who loaned him books and gave him private instruction. The sorrow and disappointment of

his life came when he was prepared to enter college. It was then that his father announced to him that there was one condition, and only one, upon which he would consent to give him a college education; and that was that he should enter the ministry. This the young man flatly refused to promise, and expressed his desire and determination to study for the bar; adding that he could not conscientiously preach the theological dogmas in which he did not believe. The result was that the young man abruptly left the paternal roof under circumstances that would have daunted a nature less energetic, determined, and hopeful than his. He pursued his studies, however, with unabated zeal, reciting to private tutors, so that by the time he was admitted to the bar he was fairly well equipped for battling with the world. His career as a lawyer was, however, destined to be of short duration. In 1860 he removed to Port Huron, Michigan, and in 1865 he definitely abandoned his profession and entered the field of journalism and politics. He never but once sought a political office for himself; and that was in 1866, when he became his party's candidate for Senator. He was defeated, however, his party being in the minority. He made a strong canvass on the occasion, and established a reputation as a campaign orator. Soon after this he sold out his paper and removed to Detroit, where he became editor-in-chief of the *Detroit Daily Union*. In this field he achieved a notable success, and soon became widely known as a brilliant editorial writer. A few years after this the *Union* was merged with the *Detroit Evening News*, and he became one of the principal editorial writers on that paper. In 1877 he was induced to go to Washington as the correspondent of the Scripps Syndicate, which then consisted of five daily papers, published,

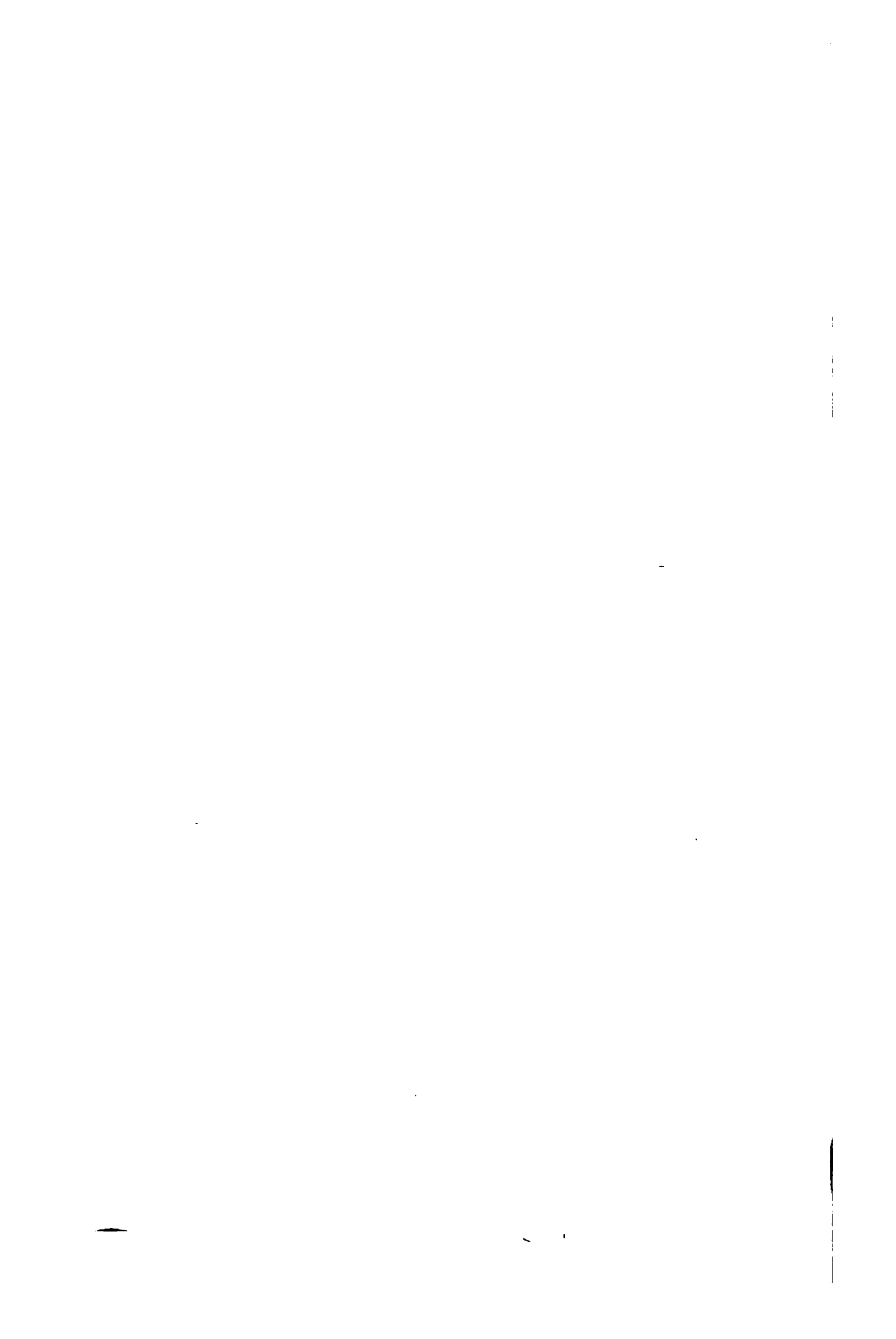
respectively, in Detroit, Buffalo, Cleveland, Cincinnati, and St. Louis. He served in this capacity for several years; but in the meantime he was offered a position on the Examining Corps of the United States Patent Office. He accepted this position in 1880, and continued in the service for more than thirteen years. He was rapidly promoted, and in 1886 was made Principal Examiner and placed in charge of one of the Scientific Divisions of the Patent Office. He served in that capacity with distinguished ability until after the publication of his first book, in 1893, "The Law of Psychic Phenomena." Without violence to the truth it may be said that one morning, in 1893, Dr. Hudson awoke to find himself famous throughout the English-speaking world. His book found an enormous sale, which still continues in a constantly increasing ratio. It was followed two years later by "A Scientific Demonstration of the Future Life." By many the latter book is preferred; but his first great work will be the standard by which posterity will estimate his standing as a pioneer in the scientific survey of the whole past field of psychical research. These were in turn followed by "The Divine Pedigree of Man," and in 1903, by "The Law of Mental Medicine." The latter was published only a few days before Dr. Hudson's death, which occurred at his home in Detroit, May 26, 1903, after a severe attack of heart trouble.

In recognition of his work, Dr. Hudson was honored with the degree of LL.D., by St. John's College, Maryland, and with Ph.D., by Ewing College, Illinois.



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THE
EVOLUTION OF THE SOUL
AND OTHER ESSAYS

I

THE EVOLUTION OF THE SOUL

SOME years ago I tentatively formulated a working hypothesis for the systematic study of the phenomena of the human soul, otherwise popularly known and designated as psychic phenomena. These include mesmerism, hypnotism, spiritism, demonology, mental therapeutics, and a thousand other things which need not be mentioned here, for I have no intention of troubling you with them on this occasion.

The central idea in my mind when I entered upon the study of this subject was that the phenomena of the soul could and should be studied just as the physical sciences are studied. In point of fact I had been deeply impressed by the opening sentence of Lord Bacon's *Novum Organum*. These are the words:

"Man, the minister and interpreter of nature, does and understands so much as he may have discerned concerning the order of nature by observing or by meditating on facts: he knows no more, he can do no more."

It is true that these words were spoken in reference to the physical sciences; but I confess that I never could understand why the same remark does not apply to the

investigation of all truth, physical or spiritual. If there is truth in spiritual philosophy, there must be facts in existence demonstrative of that truth.

I hold that if there is in this world anything that it is important for man to know, he can, and will, eventually find it out by the processes of induction, — that is, by reasoning from observable facts and phenomena. There are many facts in nature which man is curious to know, but which he never can know. But it will generally be found that they are facts which it is unimportant that he should know. For instance, it might gratify a laudable curiosity to learn what is on the farther side of the moon; but it would be difficult to imagine what benefit humanity could derive from the knowledge. On the other hand, if man has a soul, it is of the utmost importance to him that he should know it; and there are facts which can bear no other rational interpretation. It is of some of these that I purpose now to speak.

In my published works I have set forth many facts which seem to me to be demonstrative, not only that man has a soul, but that it is destined to a future life. These, however, are mostly psychical phenomena, which I do not now propose to consider, except incidentally. Not that I distrust their validity, for a psychic fact is just as much a fact as a granite mountain; but as it is quite fashionable in certain highly respectable circles to deny the existence of psychic phenomena altogether, I intend, on this occasion, to confine myself largely to the universally admitted facts of the physical sciences, particularly those of organic evolution, and incidentally those of cerebral anatomy and experimental surgery.

My theme is Evolution and the Dual Mind, or the Genesis of the Human Soul. These two topics are

inseparably connected, and must, therefore, be treated together.

The hypothesis upon which I base all my conclusions is embraced in two fundamental propositions, the first of which may be stated as follows:

Man is endowed with a dual mind.

That is to say, in the sum of the faculties, capacities, powers, and limitations of the mind of man, there are two distinct phases of activity, or states of consciousness, each characterized by phenomena peculiar to itself. Stated thus conservatively, the proposition will not be seriously disputed by any student of psychology who has kept pace with the discoveries of modern science. I prefer, however, to state it, provisionally, thus:

Man is endowed with two minds.

I prefer this mode of stating the proposition for two reasons: First, because it appears to be true. That is, everything happens just as if it were true, and that is all any student pretends to expect in a working hypothesis. Secondly, I prefer it because it admits of clearer treatment, inasmuch as it requires less of roundabout phraseology to express my exact meaning. The conclusions derivable from the proposition are, however, precisely the same, whichever way it is stated. I adhere, therefore, to my usual way of putting it, and state, as my first proposition, that man is endowed with two minds.

Each of these two minds is capable of independent action, and they are also capable of synchronous action. But in the main, they possess independent powers and perform independent functions. The distinctive faculties of one pertain wholly to this life: those of the other

are specially adapted to a higher plane of existence. I distinguish them by designating one as the Objective Mind, and the other as the Subjective Mind.

The objective mind is that of ordinary waking consciousness. Its media of cognition are the five physical senses. Its highest function is that of reasoning. It is especially adapted to cope with the exigencies of physical environment. It is the function of the brain; and the latter is the ultimate product of organic evolution.

The subjective mind is that intelligence which is most familiarly manifested to us when the brain is asleep, or its action is otherwise inhibited, as in dreams, or in spontaneous or induced somnambulism; or in trance or trancoïd states and conditions, as in hypnotism. Any one who is in the least acquainted with the phenomena resulting from any one of these mental conditions is aware that wonderful exhibitions of intellectual power often result. The significant feature of the phenomena is that, other things being equal, the intellectual powers thus displayed bear an exact proportion to the depth of the trance (to use a generic term), or, in other words, to the degree in which the action of the brain faculties is inhibited.

Thus far I have not travelled outside the range of the observation and experience of any intelligent person; but I have made a *prima facie* case of duality of mind. There are thousands of illustrations that amount to demonstration of the law, which must be omitted for want of time, but which will be readily recognized on reflection.

The second proposition of my hypothesis is this:

The subjective mind is constantly amenable to control by suggestion. A corollary of this proposition is that

the subjective mind is incapable of inductive reasoning. The meaning of this is that the subjective mind involuntarily accepts as veridical the ideas or statements of fact imparted to it. These statements or ideas may be imparted by the oral suggestions of another, or they may arise from the education of the individual. In the latter case they are termed auto-suggestions. There are no exceptions to this law, although there are some apparent exceptions. It will invariably be found, however, that the apparent exceptions are the clearest possible illustrations of the absolute universality of the law. A crude example of the power of suggestion is witnessed when a hypnotist declares to his subject that he is another person. The alacrity with which the subject accepts the suggestion, and the fidelity to nature with which he personates the character suggested, are matters of general knowledge and observation.

A third proposition which must be stated in this connection is this:

The subjective mind possesses the power of transmitting intelligence to other subjective minds otherwise than through the ordinary sensory channels. In other words, it possesses the faculty of telepathy.

I trust that no one will be startled out of his sense of propriety when I remark that the world owes much of the valuable knowledge it possesses of the subject of psychology to that much maligned practice, that *bête noir* of ignorance, hysteria, and malignant imbecility, known as hypnotism. It is to hypnotism that we are primarily indebted for the verification of the law of duality of mind; although a vague and speculative idea of that law has been floating loosely in the minds of various philosophers for more than two thousand years.

It is known to everybody that when a subject is completely hypnotized his brain is asleep, — that all the phenomena of natural sleep are present, including the inhibition of the senses and a more or less complete retirement of the blood from its channels in the brain. It is also well known that in this state the subject will often exhibit a preternatural intelligence, far transcending his normal powers. This intelligence is that of the subjective mind, of which the brain is not the organ, the action of the brain being at the time inhibited.

Telepathy was demonstrated to be a faculty of the human mind by the immediate successors of Mesmer. Owing, however, to the determined stand taken against mesmerism by physicians, who were frenzied because it had been demonstrated to be a valuable therapeutic agent, telepathy was ignored by the scientific world until the London Society for Psychical Research made it respectable to believe in it. Their demonstrations were made largely by means of hypnotism. I may perhaps be pardoned for remarking that I was the first to point out the fact that the power of telepathy belongs exclusively to the subjective mind.

The law of suggestion was also discovered by means of experimental hypnotism. In fact, it was supposed to be applicable only to persons in a state of induced hypnosis until, in my first published work, I called attention to the fact that it is a universal law of the subjective mind. I then made a generalization of the subject matter by formulating the proposition that the subjective mind is incapable of inductive reasoning.

I now invite your attention to a table, — the result of many years of study of this subject. It classifies the faculties of the two minds in strict accordance with the

facts of experimental psychology as developed by thirty years of my own experimentation, and of that of the Society for Psychical Research beginning in 1882.

| Objective Mind. | Subjective Mind. |
|---|---------------------------------|
| 1. | 1. Instinct or Intuition. |
| 2. | 2. Controlled by Suggestion. |
| 3. Inductive Reasoning. | 3. |
| 4. Imperfect Deductive Reasoning. | 4. Perfect Deductive Reasoning. |
| 5. Imperfect Power of Recollection. | 5. Perfect Memory. |
| 6. Brain Memories of Emotional Experiences. | 6. The Seat of the Emotions. |
| 7. | 7. Telepathic Powers. |
| 8. | 8. Kinetic Energy. |

In undertaking an analysis of the faculties of the two minds, one broad and pregnant fact stands forth in bold relief and strikes one with the force of a revelation, and that is that the only faculty which belongs exclusively to the objective mind is that of inductive reasoning.

The other objective faculties set down in the list, namely, the power of deductive reasoning and of memory, are the necessary concomitants of induction. The obvious explanation is that inductive reasoning presupposes facts to reason from; and memory is the storehouse of facts. Moreover, the power of deduction is obviously a necessary part of inductive reasoning.

It will be observed that these faculties, the concomitants of induction, are shared by the subjective mind; the only difference being one of degree. That is to say, they are perfect and inherent in the subjective mind, whereas, in the objective mind they are exceedingly imperfect, and depend for their degree of development upon laborious cultivation.

Other faculties belonging primarily to the subjective

mind are *represented* in the brain; as, for example, the emotions. We are told that every faculty, every emotion, has its special compartment in the brain structure. This may be, and doubtless is, true. Whether each compartment has been correctly located, is another question. However that may be, our emotional experiences are registered in the brain. That is, each objectively conscious experience creates new brain cells, which in the aggregate constitute the brain memories of our experiences. But they are only memories. They are facts for the use of our inductive powers. They complete the mental organism of the brain. The seat of the emotional faculties is, nevertheless, in the subjective mind.

It will thus be seen that the aggregate of the faculties of the objective mind constitute pure intellect. They are the faculties of reason and judgment. They form the judicial tribunal of the dual mind. When properly cultivated and developed, they sit in judgment upon every act of our lives; they regulate every emotion; they restrain every passion and direct it into legitimate channels. In short, reason is at once the tenure by which man holds his free moral agency, and the power which enables him to train his soul for weal or woe in this world and the world to come.

Referring now to the faculties of the subjective mind, I will premise by saying that it is impossible to make a complete analysis of them without being compelled to consider them with reference to a future life. The reason is that many of them are wholly useless in this life. Others perform limited functions in this life, but each and all are perfectly adapted to the uses of the *discarnate soul*.

The limitations of power in the subjective mind con-

sist in the fact that as long as the soul inhabits the body, it is normally amenable to control by suggestion. That is to say, it accepts as veridical every suggestion imparted to it. This apparent deficiency is to a great extent supplied in this life, and wholly in the future life, by the faculty of intuitive apprehension of essential truth.

I have now laid down a provisional foundation for the argument which is to follow. I am sensible that the proofs are thus far meagre and unsatisfactory from a scientific point of view, but I hope to be able to remove that objection before I conclude.

I shall first consider the subject from the evolutionary view-point. I do so for four good and sufficient reasons, namely:

First, because the known facts of evolution are demonstrative of duality of mind.

Secondly, because they are demonstrative that the brain is not the sole organ of the subjective mind.

Thirdly, because they show that in the lowest order of animal life is found the promise and potency of a human soul.

And fourthly, because the same facts reveal the Living God, and demonstrate the divine pedigree of man.

In dealing with these propositions I must take for granted what science so clearly shows, that man is the product—the highest possible product—of organic evolution. That is, by a series of progressive changes, man was evolved from the lower orders of animal life.

I shall undertake to show that, in the history of organic and mental evolution in this world, the subjective mind antedates the objective mind by untold millions of

years; that the highest manifestation of intellectual power in mankind finds its embryotic prototype in the mental powers of the lower animals; that, as the physical man descended in a direct line from the primordial germ, so do we find therein the promise of a human soul, with all its God-like attributes and potentialities.

In undertaking this task I shall not tax your credulity by propounding unsupported dogmas or undemonstrable propositions. I purpose to deal with the simplest of the well known facts of organic and mental evolution. The only thing that I shall take for granted is that every intelligent person present accepts the fundamental doctrine of evolution. There are two theories to choose from:

One is that the Great First Cause is an infinite intelligence, and as such is capable of impressing the universe of matter with such laws as result in the creation of worlds and of men by a process of gradual, progressive development or evolution.

The other theory is that God is a being of somewhat limited intelligence, and is, consequently, compelled to supplement his work from time to time, by special creations to supply deficiencies or meet unexpected emergencies.

I take it for granted that most of us are capable of entertaining the grander, nobler conception of the Deity and his attributes embraced in the theory of evolution. I shall not, therefore, weary your patience with a long dissertation on the subject of evolution. It must suffice to say that the accepted theory is that man is descended from the lower animals by a line so direct and obvious that the scientific investigator is compelled to yield instant assent to the doctrine. Happily, the time is past when belief in evolution subjected one to the charge of

religious skepticism, of materialism, or of atheism. Enlightened people are no longer frightened at the progress of science, or regard it as the enemy of religion, or fear that a demonstration of the truth of the doctrine of evolution will annihilate God or subvert the teachings of the Man of Nazareth. In point of fact, the study of purely organic evolution, whilst it gives a higher conception of the powers and attributes of the Great First Cause, neither proves nor disproves any of the essential doctrines of Christianity.

It begins with the primordial germ and ends with man; but it can neither prove nor disprove the doctrine of spontaneous generation of life in the germ, nor can it either prove or disprove the doctrine of the immortality of man. It traces his pedigree from a microscopic, unicellular organism up through a thousand gradients to the grand culmination of physical perfection; and it has demonstrated that he is the highest possible product of organic evolution; but it pauses, helpless and impotent, before the grander problem, — that more momentous question, — “Is this all there is of evolution? Is there nothing in your science to inspire a hope that in some higher realm evolution may still carry us forward to a grander and nobler destiny?”

Thus far the study of organic evolution has failed to throw more than a faint sidelight upon the problem. The manifest reason is that its students have confined their attention to the physical aspect of the question, leaving the mental and spiritual sides unexplored. Even those who have sought to link the problems of the soul with the facts of organic evolution have generally begun at the wrong end of the subject and lost their bearings in a maze of metaphysical speculation.

It will eventually be found that it is in the study of the evolution of the mind, beginning where animal life begins, that we come into contact with the facts which not only reveal the Living God, but proclaim the divine pedigree of man. It is there that the facts may be found, which demonstrate the existence of a soul in man; which reveal its genesis, and by which can be traced its rise, progress, and development from the beginning of organic life on this planet up to its perfection in man as a self-existent entity.

Let us begin, then, with the lowest form of animal life — the protozoa. These exist in vast numbers and in considerable variety. They are unicellular organisms, microscopic in size, and are composed of protoplasm. The latter term is applied to a viscid, contractile, semi-liquid, more or less granular substance, which forms the principal portion of an animal cell. It is, according to Huxley, "the physical basis of life." To be more exact, it should be said that it is the basis of the material medium through which life manifests itself.

Of the protozoa there is one group called the Monera. These, according to Haeckel, appear to be the lowest of the protozoa, for the reason that they are without nuclei, and hence, without visible organs.

To use the language of Haeckel:

"The Monera are the simplest of permanent cytods. Their entire body consists merely of soft, structureless plasmon. However thoroughly we examine them with the most delicate chemical reagents and the strongest optical instruments, we find that all the parts are completely homogeneous. The Monera are, therefore, in the strictest sense of the word, 'organisms without organs'; or even in a strictly philosophical sense, they might not even be called 'organisms,' since they possess no organs, since they are not composed of various particles. They can only be

called organisms in so far as they are capable of exercising the organic phenomena of life, of nutrition, reproduction, sensation, and movement. If we tried to construct, *a priori*, the simplest conceivable organism, we should always be compelled to fall back upon such a Moneron."

Here, then, we have the very lowest form of animal life, — "an organism without organs," a simple mass of plasson, minus even the nucleus which belongs to the true cell; and, therefore, absolutely without a physical organization. And yet it is endowed with a mind — a conscious intelligence. In view of the function it performs, this is necessarily true. Any adaptation of means to ends is perforce the result of a mental process. A living creature is a mind organism; for it is mind, and mind alone, that distinguishes the animate from the inanimate. A cell is a living creature: therefore, the cell possesses a mind.

This, quoting largely from memory, is the reasoning of Professor Gates, of Washington, who has for the last twenty years given more intelligent study to the subject of cellular psychology than has any other man living.

In an article in the *Therapist*, for December, 1895, he says:

"Unicellular organisms possess all the different forms of activity to be found in the higher animals. Thus, the simplest cell can transform food into tissue and other metabolic products, and this is the basis of all the nutritive activities and processes of the higher animals; the cell can move parts of itself and is capable of locomotion, and this is the basis of all movement in the higher animals brought about by bone and muscles; the cell can feel a stimulus and respond, and this is the basis of the sensory faculties of the higher animals; the cell can reproduce itself by segmentation, and this is the basis of reproduction in the higher animals; the cell on dividing inherits the actual qualities

of its parent mass, and this is the basis of heredity; in short, the cell contains in simplest form all of the activities to be found in man."

Before taking leave of Professor Gates, I desire to remark that he has demonstrated by a series of experiments that the cell has a capacity to acquire knowledge; that is to say, it can be educated. I have no time, however, to dwell upon that branch of the subject. It is sufficient for our present purpose to know that the unicellular organism, of the lowest order, is endowed with a mind.

What is this intelligence which so unerringly adapts means to ends and enables the creature to perform all those acts which are preservative of its life and of its species? The ready reply is, "Instinct." True, we have a name for it that is in the mouth of every schoolboy. But names do not explain anything. What is instinct? Before defining it in set phrase, I must remark that instinct in the lower animals and intuition in man are identical, the latter being merely a higher and more complex development of the former. I define it as follows:

Instinct, or intuition, is the power possessed by each sentient being, in proportion to its development and in harmony with its environment, to perceive or apprehend, antecedently to and independently of reason or instruction, those laws of nature which pertain to the well-being of the individual and of the species to which it belongs.

Like every other faculty, organ, or agency in nature or in human affairs, it had a simple beginning. Like everything else of value to mankind, it has developed by a series of progressive steps to a state of won-

derful complexity. It has kept pace with the physical development of animal life and with the mental development of humanity, until now it is the most wonderful faculty known to man; it is the most potential force below that of omnipotence; it is the most gigantic intellectual attribute below that of omniscience; it is the subjective mind of man; it is the mental organism of the immortal human soul.

Let no one be frightened at the prospect of being compelled to find the genesis of his soul in such simple beginnings. When the theory of organic evolution was first promulgated, many sensitive persons revolted at the idea of tracing their physical pedigree back through a simian ancestry to a microscopic mass of protoplasm; but facts are the words of God; and the pedigree of the physical man is too plainly written in his organism to be misinterpreted by Reason.

But no one has cause to be ashamed of the origin of his soul, for its first manifestation of intelligence in the protoplasmic cell was essentially divine. In other words, it exhibited the essential attribute of omniscience, differing only in degree. The mental power that enables the moneron to perceive or apprehend the laws of its being is a power antecedent to and independent of reason, experience, or instruction; and, I submit, no other terms are required to define the essential attribute of omniscience.

The profound significance of this one fact cannot be overestimated. Standing on the very threshold of sentient life, Science beholds indubitable evidence of an antecedent, omniscient intelligence; and, in the primordial germ, the embryo of physical man and the promise and potency of an immortal soul, endowed with God-like attributes and powers.

Step by step this intelligence expanded and became more and more complex as animal life rose in the scale of being and increased in mental and physical complexity, until man appeared—the crowning glory of sentient life, the ultimate product of organic evolution. Nor did the process stop here. It is still going forward, reaching into higher and higher realms as man approaches the higher civilization.

Much has been written on the subject of instinct by Darwin, Spencer, Huxley, Romanes, and a host of lesser lights. Many facts have thus been accumulated; but it seems to me that no adequate generalization has yet been made, nor have the phenomena been correlated with cognate phenomena in such a way as to give us a true conception of the far-reaching significance and importance of the faculty.

There are many and variant definitions of the word “instinct”; but none of them seems to me to describe the full scope and province of the faculty. All authorities agree, however, that it is antecedent to reason, and yet that it impels to just such acts as reason would approve; that its sphere of usefulness among the lower animals is to preserve the life of the individual and to perpetuate the species to which it belongs.

Is this all there is of instinct? Is that faculty confined, in its sphere of operations, to the preservation of physical life? I think not.

It is within the knowledge of every one that instincts can be cultivated and their scope enlarged. Every step from the lower animals upward is marked by a corresponding enlargement and a constantly increasing complexity of the instinctive faculty. Heredity plays an important rôle in this development; and up to the time

when the brain appeared as a factor in organic evolution, heredity was doubtless the prime factor. When the brain appeared, however, instinct did not cease its functions. On the contrary, it developed the more rapidly, and the more rapidly enlarged its sphere of activity and usefulness.

In fact, the brain seems to have been evolved in response to the necessities of animal existence in the "great struggle for life" then going on, just as other weapons of offence and defence were evolved. When it appeared, it immediately became the educator of the subjective mind, which is the mind of instinct or intuition, and which, under the law of suggestion and by means of its perfect memory, accepts, assimilates, and retains whatever is imparted to it by the objective mind. The subjective thus becomes a vast storehouse of memories, habits, and principles, good or bad, that flow into it through the education of the objective mind. Hence it is that when the subjective faculties are roused into activity, they pour forth their accumulated store of knowledge, often displaying unsuspected ability and learning.

I am aware that it has been held that as intelligence increases, instincts decrease in number and complexity. Cuvier, for instance, maintained that instinct and intelligence stand in inverse ratio to each other. On the other hand, it has been shown by Pouchet that those insects with the most wonderful instincts are certainly the most intelligent. In the vertebrate series the least intelligent members — the fishes and amphibians — do not possess complex instincts. And, according to Morgan, the mammal most remarkable for that faculty, namely, the beaver, is highly intelligent. In point of fact, the exact

opposite of Cuvier's dogma is demonstrably the truth; and when we come to include man in the category of animals possessing the faculty of instinct, it will be obvious that intelligence and instinct stand in direct ratio to each other in all the broad realm of sentient life.

Darwin made a partial statement of a great truth when he said: "Some intelligent actions, after being performed during several generations, become converted into instincts and are inherited." (See *Descent of Man*, p. 67.)

If he had said that "all intelligent actions, whether of animals or of men, which are promotive of the well-being of the individual or of the race, physically, mentally, morally, or religiously, after being performed during several generations, become converted into instincts and are inherited," he would have made a more complete statement of the principle, and would have defined the higher limitations of the faculty of instinct as developed in this world.

Among the lower animals, instincts are comparatively fixed and stable in their operation from generation to generation. But as animals rise in the scale of intelligence, their instincts are modified from time to time to meet the exigencies of changing environment. Some are wholly lost when there no longer exists a necessity for their exercise. Others are radically changed, and innumerable new ones are acquired. Romanes, in his great work, *Mental Evolution in Animals*, cites numerous examples illustrative of these propositions.

As before remarked, man forms no exception to these rules. The acquisition of a brain by the lower animals did not destroy the mind previously existent: on the contrary, it only served to give it greater scope, com-

plexity, and power. Neither did the wonderful development of the brain in man destroy that mind through which instinct had manifested itself from the moneron upward. It only served to modify the old instincts, eliminate those which were no longer useful, and add new ones suitable to the environment and the stage of intellectual and moral development.

In man, instinct is no longer confined to mere physical self-preservation. It reaches up into the intellectual realm — into the domain of sociology, morality, religion, conscience — into all the higher activities which distinguish man from the brute creation. All the acts resultant from these higher activities of the mind, in the language of Darwin, “after being performed during several generations become converted into instincts and are inherited.”

In the meantime, the general function of instinct is the same in man as it is in the lower animals.

Let me not be misunderstood on this point. What I desire to be understood as saying is this: that all impulses, desires, or emotions which are promotive of the well-being of the individual or of the species to which he belongs, appertain to the domain of instinct or intuition. And this is true whether they are manifested in the lower animals in the impulses of self-preservation and reproduction, or in the noblest acts of man when they are promotive of the general welfare of humanity, physically, mentally, morally, or spiritually.

Moreover, the memory of the subjective mind being perfect, all the experiences of the individual, all the learning which he may have acquired, however superficially it may have been impressed upon the brain, contribute to the grand sum-total of the intellectual and moral equipment of his soul.

Unperverted instincts are always promotive of the highest interests of the individual and of the general welfare of the race. But it will be readily understood that even the higher instincts, in common with the lower, may be perverted by a wrong education or pernicious environment. A perversion of the instinct of religious worship has drenched the earth with blood. A perversion of conscience lighted the fires of the Inquisition, and still peoples the earth with cranks, who would re-light those fires if they had the power.

Thus far I have confined my remarks to those instincts which pertain to the well-being of the race, and which may be classed under the generic title of the "instinct of self-preservation," although they include the broadest altruism in their ultimate development and application. It is, however, with the higher intuitional powers that we are most concerned for the purposes of this argument. I have said that instinct and intuition are identical. They differ only in degree and sphere of activity, and even in these they merge by imperceptible gradations. They are both concerned with general laws and essential truth. They both pertain to the welfare of the individual and his species. But intuition is concerned with the welfare of the soul in the future life as well as with that of the body in this life.

I now approach another class of instincts or intuitions of a more purely intellectual character. I provisionally classify them separately for the reason that they do not, save in a very indirect way, contribute to the preservation of life or of the race. It is, nevertheless, but a higher development of the same faculty, and it is generally denominated "intuition."

I refer to that power or faculty in man which enables him, under certain conditions, not yet clearly understood, to perceive or apprehend certain fixed laws of nature by intuition — that is, antecedently to reason and independently of objective education. It is a faculty rarely developed, and only appears under abnormal, or at least exceptional, conditions. A sufficient number of cases, however, have come to light to enable us to be certain that the faculty exists, and to lead inferentially to some very broad generalizations.

The instances of its development which are most familiar to the general public are in mathematical and musical prodigies, of whom Zerah Colburn and Blind Tom are, respectively, representatives. Colburn could solve the most intricate arithmetical problems instantaneously when he was a mere child and before he had been taught the powers of the nine digits; thus demonstrating the fact that he possessed the intuitive power of perception of the law of numbers.

Blind Tom was an idiot, and hence was incapable of receiving an education, and of reasoning in the objective sense of the term; and yet, when a child, and absolutely without instruction of any kind, or the brain capacity to receive instruction, he was able to improvise the most delightful and harmonious strains of music on the piano.

From this case alone two very important conclusions are to be derived:

First, it is demonstrative that Blind Tom possessed an intuitive knowledge of the laws of harmony of sounds; for he had no education, musical or other; nor was he capable of receiving an education depending upon a brain structure, for he was a microcephalus — an idiot.

Secondly, it is demonstrative that the brain is not the

organ of the subjective mind; for all real music has its origin in the soul.

On this latter point I particularly desire to make myself clearly understood. I have assumed that the subjective mind of man is directly descended from that mind which is found in the lowest order of animal life, differing only in its degree or stage of development; that it existed millions of years before a brain was developed; and that, consequently, the brain never was its organ and is not its organ now. Startling as this hypothesis may be to materialistic scientists, it is, nevertheless, demonstrably true, as I shall proceed to show.

There is, in fact, no *a priori* reason why it should not be true. On the contrary, it would require a violent stretch of the imagination to conceive the idea that an organized intelligence once existent could be destroyed by progressive development. Moreover, it would require very strong affirmative evidence to convince a reasonable being that an intelligence once located in a physical structure could change its organ of manifestation. Since we know, therefore, that the subjective mind once existed independently of a brain, we must suppose that it continues to do so, at least until the contrary is demonstrated.

I say we *know* that it once existed independently of a brain structure. That is, we know that the instinctive mind of the lower animals is identical with the subjective mind of man; for the reason that the faculties are the same in both. A glance at the list will make this proposition clear.

The first is intuition, which is identical with instinct in animals. The second is deduction, which is a concomitant of instinct or intuition. Inerrant deduction is

the instinctive logic of the subjective mind; and this is as true of the lower animals as it is of men. Next come the emotions, which are obviously the same in men and animals, being differentiated only by the restraining powers of reason and conscience. The next on the list is telepathy. There are many who hold that telepathy is largely employed by the lower animals to supply their deficiencies in oral means of communication. I do not pretend to know whether this is true or not, never having investigated that subject with sufficient thoroughness to enable me to venture an opinion. However this may be, the faculty of telepathy clearly belongs to the subjective mind of man, and, like many other faculties of that mind, it contains the promise and potency of powers indispensable to the discarnate soul.

I must not forget to mention in this connection that the limitations entailed by the law of suggestion are precisely the same in animals as in men. Were this not true, man could never have obtained dominion over animals stronger than himself. In other words, but for that law man could never tame a tiger or harness a horse.

It will thus be seen that all *a priori* reasons sustain the proposition that the brain is not the organ of the subjective mind.

Fortunately, however, the materialistic scientists themselves have unwittingly demonstrated this fact by the use of the scalpel. The scalpel, you know, is their favorite instrument of search for the human soul. They have cut and carved, weighed and measured and chemically analyzed the brains of men living and dead; and because they have failed to corral a soul by those means, they have dogmatically declared that man has no soul.

But, as I said, they have, without realizing it, demonstrated the fact that they have all along been looking for it in the wrong place. Thus, more than twenty years ago, ex-Surgeon-General Hammond, in the President's address delivered before the New York Neurological Society, showed that certain faculties of the mind are seated in the spinal cord, and not in the brain. In his great work on *Insanity* he reiterates his declaration and demonstrates by many original experiments that the brain is not the organ of the instinctive faculties. Among other experiments, he totally eliminated the brains of certain living animals, and found that the instinctive functions were performed precisely as before.

He quotes many eminent authorities to sustain his position, and explicitly declares that the instinctive faculties do not reside in the brain. He further declares that they are seated "exclusively in the medulla oblongata, or in the spinal cord, or in both those organs."

Now, be it remembered, those faculties which are found not to be located in the brain are all faculties of the subjective mind.

I am not disposed, however, to agree with Dr. Hammond in his confident statement that those faculties are located exclusively in any organ of the human body, much as I admire him for his genius and his vast learning. That declaration was doubtless made without duly considering all the facts collateral to the subject he was then investigating. Be that as it may, he has succeeded in demonstrating duality of mind by the use of the scalpel.

He doubtless felt that it was incumbent upon him to locate the instinctive faculties somewhere, since he had shown that they do not reside in the brain. This, how-

ever, is a fallacy which the Doctor will probably admit freely when his attention is called to the consequences it involves.

Materialistic scientists have succeeded in demonstrating that the objective mind is a function of the brain, and that it is, therefore, inherent in the brain. It follows that when the brain dies the objective mind ceases to exist.

This is unquestionably true. But it does not follow, as they would have us believe, that the subjective mind is inherent in any one or more organs of the body. On the contrary, there is every reason to believe that the subjective mind exists independently of any specialized organ whatever. That its control of the body is not dependent upon any specific physical organization, is shown in the moneron. Haeckel tells us that the moneron is a simple, homogeneous mass of plasson, and is entirely destitute of any organs whatever — not even containing the nucleus, which is the earliest development of a physical organ in animal life. Yet this moneron is animated by the intelligence of which I have been speaking, this God-like intelligence which materialistic science has dismissed under the name of instinct or intuition, without accounting for either, but which, wherever it appears in animate nature, is the symbol of Divinity.

Now, it seems to me to be self-evident that the power which is capable of animating a homogeneous mass of plasson with life and intelligence, is certainly not dependent upon specific organs for its capacity to animate the human body and to control its functions. There is, therefore, no *a priori* reason for supposing that the brain is the organ of the subjective mind.

Again, this is demonstrated in experimental hypnotism by the well-known fact that when a hypnotic subject is deeply entranced, he retains no recollection of what has occurred during his sleep, however exciting, or even tragic, may have been the scenes through which he passed. Now, every student of cerebral anatomy knows that every brain-thought, every experience of which the brain takes cognizance, causes a modification of brain cells, thus creating brain memories. The absence of brain memories immediately following an exciting experience is, therefore, demonstrative that the brain was not cognizant of the experience.

There are, in short, thousands of good and sufficient reasons, backed by facts beyond dispute, for declaring that the brain is not the organ of the subjective mind; and not one fact or valid argument has ever been adduced to show that it is.

These facts alone demonstrate the duality of mind. These facts alone go far to demolish the last stronghold of materialistic science in its efforts to prove the impossibility of a future life. A few words will make my meaning plain:

Their argument is based upon the hypothesis that the mind is the soul, the question of duality of mind, of course, not being considered. Their next proposition is that mind is the function of the brain and is inherent in that organ. Then they proceed to demonstrate by cerebral anatomy and experimental surgery that each faculty of the mind is controlled by a certain portion of the brain; and that when one of these brain centres is eliminated or paralyzed by accident or design, the part or faculty of the mind controlled by that brain centre is forever destroyed. This, they argue, is demonstrative

that the mind (and soul) is inherent in the brain and necessarily perishes with that organ. They also point out the fact that when the body is wasted by disease the mind grows correspondingly feeble; and they draw the not unnatural conclusion that body, brain, and mind perish together. In these premises and in these conclusions they are unquestionably right; and vain would be our hope of a future life if it depended upon the continued existence of the objective mind. That necessarily shares the fate of the physical organ of which it is the function. On the other hand, as I have already pointed out, the subjective mind is not the function of any physical organ. It is not an effect, but a cause — a cause antecedent to physical organization: an entity dependent upon organization only for the means of its phenomenal manifestation, and not for its existence. In other words, it is immanent and not inherent in the body.

A further illustration of the entire distinction in the sphere of the subjective from that of the objective mind is afforded by the involuntary functions, over which the former exercises an absolutely undivided sway. The objective mind cannot directly control one purely involuntary muscle. It cannot hasten or retard one vital process. All the marvellous co-ordination of the vegetative functions is effected through the dominion and sleepless vigilance of the subjective. Its medium of control is the sympathetic nervous system. The objective mind, on the other hand, normally directs the voluntary muscles and functions of the physical organism. Its medium of control is the cerebro-spinal system.

Now, a very important fact in this connection is that the functions of the two minds are not interchangeable. Thus, whilst the objective mind cannot, of its own vo-

lition, move a single involuntary muscle, the subjective mind can, and often does, take possession of the entire body and wield it at its will. This can be brought about experimentally by means of hypnotism, when the brain functions are held in total abeyance. It almost invariably occurs when the body is in imminent and deadly peril. At such a moment the objective faculties are benumbed; but, under the control of the subjective mind, the body acts with preternatural rapidity and precision, and feats of strength are often performed that would be impossible under normal conditions. Spontaneous somnambulism furnishes many familiar illustrations of subjective control over both the voluntary and involuntary muscular systems.

I have cited these well-known facts for the purpose of showing how much more intimate and pervasive must be the connection between the subjective mind and the body than that subsistent between the objective mind and the body.

This difference being thus provisionally established, we might reasonably expect to find that the time of reaction to sensorial stimuli would be materially decreased during hypnosis. Accordingly, we learn from the experiments of Professor Stanley Hall and others that the time of reaction is decreased nearly one-half.

These evidences, however, are merely subsidiary; but they are such indications as we might expect to find if the hypothesis is correct that the soul is immanent in the whole body and not inherent in any one part of it. The demonstrative evidence of the truth of this hypothesis is found in the phenomena immediately preceding that divine event to which the whole world moves — death.

When that supreme hour approaches we find that the

observable phenomena are precisely what we should have a right to expect if it is true that the soul of man is immortal, and that it is, therefore, immanent, and not inherent, in the body.

We also find that the objective mind, on the approach of death, exhibits precisely the phenomenon that we should have a right to expect if it is true that it is inherent in the brain, and therefore perishes with that organ. The respective phenomena of the two minds then exhibited are simply these: the objective mind, in exact proportion to the growing weakness of the bodily organs, ceases to perform its functions in perfection. And it is generally, if not always, completely obliterated before final dissolution. Materialistic scientists have taken great pains to demonstrate that fact, believing it to be a conclusive argument against the doctrine of immortality. We may, therefore, accept their facts without further question, but not their conclusions.

On the other hand, the phenomenal manifestations of the subjective mind become more and more pronounced as death approaches and the body grows weak, and its strongest ones are at the very hour of dissolution. This fact is attested by all the records of psychic phenomena, including those of the Society for Psychical Research.

It is, in fact, the ultimate phenomenal demonstration of the universal law that the more perfectly quiescent the brain becomes, the stronger become the manifestations of the subjective mind. At the hour of death, therefore, after the brain has ceased to act and the objective mind is totally extinct, there is an interval before the soul takes its flight, in which it shines forth with transcendent lustre, to give the world assurance that the death of the body is but the birth of the soul into a more perfect life.

This is somewhat of a digression, but it was necessary, in order to make my position clearly understood in reference to a vital point in the evolution of the soul.

As I have before remarked, many instances are recorded of intuitive perception of the laws of physical nature that are fully as remarkable as those I have mentioned. The conditions most favorable to the development of the power are not known. It seems probable, however, that comparative freedom from the suggestions embraced in the technicalities of objective education is one, at least, of the necessary conditions; for it is sometimes developed in idiots and frequently in children. When it is developed in children possessing a normal brain structure, it is always found, as in Zerah Colburn's case, that an objective education in the line of the development results in the loss of the subjective power. In Blind Tom's case an objective education was impossible, and hence he never lost the subjective faculty which distinguished him.

An instance illustrating this proposition was that of Jedediah Buxton, recorded in the *Encyclopedia Britannica*. It was thoroughly investigated by the Royal Society of London, in 1754. This person lived to about the age of seventy years, but never had the brain capacity to learn the first four rules of arithmetic. His abilities were equally limited in every other direction save one: he had a perfect intuitional perception of the laws of numbers. He would walk across a piece of land and tell its contents in acres as exactly as it could be measured with the appliances of the surveyor's art. "In this manner," says his biographer, "he measured the whole lordship of Elmton, consisting of some thousands of acres, and gave the contents, not only in acres, roods,

and perches, but even in square inches." After this he reduced them to square hair-breadths, reckoning forty-eight to each side of the inch. "His memory was so great," continues the account, "that in resolving a question he could leave off and resume the operation again at the same point after the lapse of a week, or even of several months."

In other words, the memory of his subjective mind was absolute, as it is, potentially, in all of us.

It must be remembered that all this, as in Colburn's case, was done without any of the extraneous aids ordinarily employed in arithmetical calculations. It was subjective mental arithmetic.

These same intuitional powers are often developed, in various directions, in savages, many instances of which will be readily recalled by those who are familiar with savage traits and characteristics. Again, the fishermen of Nova Scotia, when fishing on the banks off the coast of Newfoundland, will drift about in fog and storm for months at a time, without paying the slightest attention to their bearings; but when their craft is laden they will hoist their sails, and without having seen the sun for weeks, will steer with unerring exactitude for any port they wish to make. This faculty is so well known to the other Grand Bank fishermen that many a Yankee skipper having lost his reckoning in the weeks of thick weather has picked up a homeward bound Nova-Scotiaman and followed him into port, with as much confidence as he would have had in his own observations. The faculty has become hereditary, and it is said that a compass, or any instrument, is as superfluous to an old Nova Scotia fisherman as it would be to a homing pigeon. In fact, the homing instinct, as developed in

these men in obedience to the requirements of their vocation, is precisely the same as it is in the bird. Thus is Darwin's law confirmed and carried forward to the human race in as great perfection as it exists in the lower animals. The possibilities of its development are infinite. It is generally confined in this life to a single faculty; but not always.

I now approach the highest development of subjective power that ever has been, or ever can be, manifested in this life. It was developed to a limited extent in the long line of Israelitish prophets. It was equal to the highest demonstrations of their prophetic power. It was equal to all that can be properly interpreted as Messianic prophesies. But in no one else on this earth has it ever been manifested in such perfection as in Jesus of Nazareth.

His power of perception of the laws of nature extended into higher realms—into the domain of the human soul; into the eternal principles of right and wrong; into the true relations of man with his fellowmen; into the normal relations between God and humanity. It enabled him to invoke successfully the powers of the soul to heal the sick. It enabled him to bequeath to humanity the true, the absolute religion; a religion for all men and for all time; a religion which all the ages of eternity can never improve.

The recorded accounts of his methods of healing the sick are demonstrative of his perfect mastery of the laws of the soul in its relations to the body; and the vitality of his religion, in spite of all the adverse circumstances surrounding its birth and growth, is evidence, little short of proof, that it is founded upon the Rock of Eternal Truth. Otherwise, it could never have

survived the mistakes of its friends, to say nothing of the assaults of its enemies. It is safe to say that no other system of religion has ever flourished amid so many adverse conditions as has the Christian religion. It had its roots in a region remote from the centres of civilization, and among a nomadic race who were poor, despised, reprobated, and persecuted by their more powerful neighbors. From the first it encountered the refined philosophy of the most enlightened and cultured nations of the earth; and it has its literary setting in a volume which teaches an absurd astronomy, an impossible geography, and a cosmogony the crudeness of which is detected and exposed by the learning of every schoolboy: and yet it exists, not in decrepitude and decay, but as a vital and essential element in every civilization worthy of the name. Its theologians in times past have thrust it into conflict with every science, and it has been defeated in every encounter. Yet it is not relegated to the domain of ignorance, but flourishes in the greatest luxuriance of growth and vitality in those nations whose people are the most enlightened and progressive.

That there is to be found, within the realm of natural law, some adequate reason for this paradox, is not to be doubted. The explanation proffered in the doctrine of a continuous miracle must be rejected as scientifically untenable. It seems to me that the following propositions afford at least a partial solution of the problem:

- I. Jesus was endowed with the faculty of intuitional perception of the laws of the human soul; and he proclaimed to mankind, in a few simple statements, the essential principles which govern the relationship of man to his fellow-men and to God.

2. All men are endowed with the same intuitional powers, differing only in degree; and by this means they are enabled to recognize, when once presented, any truth which is essential to the welfare of the soul.

3. It follows that when a normally constituted person reads the simple but all-comprehensive philosophy of Jesus, his soul intuitively and instantaneously recognizes its essential truths.

We have now passed from the lowest manifestations of instinct to the highest manifestation of intuitional power ever witnessed on this earth. We may now pause for a moment to contemplate the profound significance of the facts thus presented. The first great lesson that it teaches is that God governs this universe by immutable law; and that the soul, as well as the body, is the result of evolutionary development. Indeed, the evidence that the soul has been thus developed is infinitely more perfect than that which is offered in support of the theory of organic physical evolution. There are many missing links in the chain of evidence to sustain the latter, which can only be supplied by speculative philosophy and *a priori* arguments.

On the other hand, there are no breaks in the chain of evidence of the soul's origin and development. Moreover, its inherent attributes and powers proclaimed its divine origin the moment it was ushered into existence.

I have now briefly discussed three of the four propositions with which I started out, relating to the light which the facts of evolution shed upon my fundamental hypothesis. I have shown that those facts reveal the dual mind of man; that they demonstrate that the brain is not the organ of the subjective mind; and that they disclose the genesis of the human soul. It remains to

show that the same facts reveal the Living God and record the divine pedigree of man.

I have already invited attention to the psychology of micro-organisms. I have shown that the mental structure of the moneron, the lowest of animal life, is built after the same general plan as that of Omniscience. That is to say, it possesses the same power of intuitional perception of essential truth, with a difference only in degree and not in kind. I have traced the power from the moneron to man, showing that the difference is only one of gradation and complexity.

In tracing this ascent to man, there is one consideration that must not be lost sight of, for it is of vital import in tracing the origin of the mind of the moneron. It is that in that mind resided the potentiality of a limitless development through the processes of organic and mental evolution. We have a logical and scientific right to consider these potentials, for the reason that, whenever it is possible to know what they are, all possibility of doubt as to the origin of the thing under consideration is removed. Thus, it is impossible, by means of any instrumentalities known to science, to distinguish the germinal cell of man from that of the lower mammalia. In point of fact, it requires months of development to reveal the distinction; for every organism, in the course of its individual ontogeny, repeats the history of its ancestral development. In other words, God has stamped upon the embryo of man the salient facts of the history of organic evolution.

It is self-evident, therefore, that if its potential of development could be ascertained, it would instantly determine the question of the origin or ancestry of a germinal cell.

Fortunately, the potential of development of the moneron has been well ascertained, for it has been traced in one unbroken line, through a thousand gradients, to the subjective mind of man.

We have found, then, in the lowest and in the highest development of animal life, powers that correspond in kind to the attributes of omniscience. Now, let us see what powers reside in the subjective entity that correspond to the attributes of omnipotence. The latter term, of course, implies power over the material universe and over the forces of nature. Moreover, it is a spiritual power, and not a physical force, as these terms are commonly understood.

In the first place we must assume, provisionally, that the energy resident in the mental organization of the moneron is a spiritual energy; that is, that it is an attribute of an intelligent spiritual entity as distinguished from matter — that it is a property not inherent in matter. The moneron was, therefore, the first instance tangible to our senses, where an organized spiritual entity exerted power over matter. It overcame the inertia of protoplasm and endowed it with life. In every step in the progress of organic evolution that power was manifested in a constantly increasing ratio, for every modification of physical structure was in answer to demands from within. That is to say, every weapon of offence or of defence was evolved in response to the necessities arising from physical environment and the great and universal struggle for life. The brain itself was not an exception, and it is the most potent weapon of all. Like every other means of offensive and defensive warfare, it was evolved in response to the necessities of physical environment; and it is especially adapted to that use and purpose, and to no other.

This, then, is an exhibition of the power of spirit over matter as shown in the processes of organic evolution. Guided by that God-like power of intuitive perception of the essential laws of its being, the embryotic soul impelled the development of physical structure, step by step, until the final goal was reached and imperial Man stood revealed. There the process of physical evolution ceased by virtue of the very law that brought it into being. Thus, when man attained sufficient intelligence to build a fire and to fashion artificial weapons, the demand for increased effectiveness in natural weapons ceased; for the artificial appliances were far more formidable in war and effective in peace. Hence it was that swords and ploughshares and spears and pruning-hooks became concomitant factors in the evolution of civilization; and hence it is that man is the highest possible product of organic evolution; and that the great law of progressive development must now expend its energies in the evolution of a nobler manhood, a purer morality, a higher and more enlightened religion, and a more altruistic civilization — the religion of Jesus, and the civilization of which he was the harbinger.

It was, however, reserved for man to manifest, phenomenally, those powers of the soul which correspond to the attributes of omnipotence. These powers have been manifested in thousands of ways throughout the ages. The phenomena have excited the wonder and fostered the superstitions of all races of mankind. Science wrestled with the problem for centuries and then gave it up in despair. Materialistic scientists once contented themselves with a wholesale denial of the phenomena, and a refusal to investigate. Others admitted

the phenomena, but ascribed them to all manner of agencies, from demons to the spirits of just men made perfect. I need not say that I refer to so-called spiritistic phenomena.

Science has at last succeeded in unravelling the whole mystery, removing every phenomenon from the domain of superstition, and demonstrating that all the manifestations, of whatever name or nature, proceed from the subjective minds of living persons. I cannot now enter into details, but must content myself with saying in the most emphatic manner that all that is mysterious, all that is uncanny and diabolical, all that is inane and idiotic, all that is false and infamous, all that transcends reason and common sense in psychic phenomena, is due alone to ignorance of the fundamental laws that govern the relationship between the body and the soul. The law of suggestion is of the first importance, but the last to be learned and comprehended. To remove that ignorance, and nourish the subjective mind from the pure, perennial fountain of truth alone, would be to elevate the soul to its rightful supremacy. Its intuitive powers would then be released from the trammels imposed by an environment of error and false suggestion, and it would become a "cloud by day and a pillar of fire by night," leading to the promised land of Truth and Right.

This is a slight digression, but I wish to make myself as clearly understood as possible, especially in the fundamentals.

We will first consider the control which the subjective mind exerts over the matter of which our bodies are composed. In the first place, it has complete control over all the functions, sensations, and conditions of the

body, and is the therapeutic agent in mental healing. It can exercise that therapeutic power in pursuance of suggestions emanating either from the objective mind of the individual, or from that of another person. And, let me say, *en passant*, that this is the fundamental law of mental healing, and all systems owe their success to this law, consciously or unconsciously applied. It possesses the power to inhibit pain, even to the extent of rendering a capital surgical operation painless, and that without the necessity of hypnotizing the subject. It can inhibit pain or it can cause it. It can heal the tissues or it can cause them to disintegrate. Many experiments have been made by European scientists which demonstrate this fact. Professor Bernheim records his testimony that he has caused a blister to be developed on the back of a hypnotized subject by applying a postage stamp and suggesting that it was a fly plaster. The same authority states that he was able, by suggestion, to neutralize the effect of an electric current which was otherwise absolutely unbearable, perfectly inhibiting all sensation. Professor Crookes, the eminent London physicist, declares that he witnessed, under test conditions, the handling of live coals of fire with bare hands, not the slightest injury or discomfort resulting.

The phenomenon that possesses the greatest interest in this connection, however, is that of levitation of ponderable bodies without physical contact or appliances. This I have repeatedly witnessed under the most exacting test conditions. Now, for the purposes of this argument, I care not whether that phenomenon is caused by an embodied or a disembodied spirit. I will say, however, that there is absolutely no valid evidence that it is to be referred to a supermundane origin. Everything

conspires to show that it is a power resident in the subjective mind of the psychic in whose presence the phenomenon is produced. The point is that it is a spiritual energy, inherent in the souls of men, that is competent to modify or set at naught the action of the physical forces of nature. In the cases reported by Professor Bernheim it neutralized a powerful current of electricity. In the case reported by Professor Crookes it defied the laws of combustion. In cases of levitation it defeats the law of gravitation. Thousands of cases might be mentioned of even more startling import; but time forbids. All the ages have witnessed these phenomena, and the man who doubts their verity is not entitled to be called a skeptic. He is simply ignorant of what he might know if he would conduct an intelligent investigation.

Thunder was once believed to be the voice of an angry god. The bolts of lightning were forged by Vulcan as instruments of wrath in the hands of Jupiter. Inductive science has explained the thunder, enslaved the lightning, and demonstrated that its phenomena are of far more startling import than was dreamed of in the philosophy of mythology.

Psychic phenomena have been ascribed to angels and to devils, to spirits of health and to goblins damned. Inductive science has discovered their proximate origin, and utilized some of the forces for the benefit of mankind. It is now seeking the Ultimate Cause, and to demonstrate that the truth is of far more wonderful significance than were the wildest dreams of superstition.

Let us, then, pursue this inquiry in strict accordance with the inexorable rules of logic and scientific induc-

tion. They cannot lead us astray if facts are the words of God.

Let us now, by way of recapitulation, group these faculties and forces, mental and dynamic, with which we find the subjective entity to be endowed.

Leaving out of present consideration all its faculties except those of intellect and kinetic energy, we find a being endowed with a mind the inherent powers of which cannot be adequately described except in terms that are definitive of the essential attributes of omniscience; and with a dynamic or kinetic energy that cannot be adequately described except in terms that apply with equal pertinency to the attributes of omnipotence.

On the other hand, and I wish it distinctly to be understood and remembered, the one distinctive faculty belonging exclusively to the objective mind—that of inductive reasoning—cannot be ascribed to omniscience without employing contradictory terms as gross and palpable as it would be to speak of a rectangular circle. Omniscience is knowledge of all things. Induction is an inquiry. Obviously, therefore, it is but a statement of a truism to say that omniscience is incapable of inductive reasoning. Neither is the subjective mind of Man capable of induction, and for precisely the same reason. Its very limitations, therefore, stamp it with the sign-manual of Omniscience.

Whence come this God-like intelligence and dynamic energy? Materialistic science tells us that we inherited it from the moneron; and that the moneron inherited it from inorganic matter,—minerals. At this point some of them become "agnostic." Agnosticism, you know, is aggressive ignorance. Hence, some of the agnostics set themselves to write books to show that beyond a cer-

tain point there exists the great "Unknowable." Others take the lecture platform and "split the ears of the groundlings" with vociferations of their aggressive, uncompromising ignorance.

Another class of scientists dismiss the whole subject by an oracular statement that these powers are inherent in matter. The great bulk of them, however, belong to the school of scientists which finds its great exemplar in the late lamented "Topsy." Their explanation is that "it jest growed."

In the meantime the great mass of civilized mankind have reached the conclusion, by this same process of intuitive perception of which we have been speaking, that the Great First Cause of all things is a being endowed with infinite intelligence and an infinite potential energy. This of itself is a *prima facie* evidence of its verity, for it is an essential truth if it is a truth, and intuition deals with Essential Truth. The burden of proof, consequently, rests upon those who deny the proposition. If, therefore, all the other facts confirm this intuition, the evidence will be conclusive.

The logical propositions bearing upon the question may be formally stated as follows:

1. There are but two known ways of acquiring knowledge. The first is by intuition, and the second is by education. I employ the word "education" in its broadest sense, exclusive of instinct or intuition, and inclusive of every other means of acquiring knowledge.
 2. Instinctive or intuitive knowledge is acquired by heredity.
 3. Hereditary knowledge presupposes an antecedent mind possessing identical faculties with those inherited.
- These three propositions are axiomatic and will not

be disputed, for they are confirmed by everyday observation and experience. Thus, when we see a bird build its nest we know that the immediate ancestor of that bird possessed the identical faculty and built its nest in precisely the same way. When we see a new-born animal shrink from its natural enemy, we know that it inherited the knowledge thus evinced. We know that its ancestors possessed the identical instinct. Now, we can trace this line of heredity back from Man to the moneron; and we know also that the monera reproduce themselves by segmentation, and transmit their instincts. But what of the first moneron? For there must have been a first moneron, and it must have had in perfection the instinct of self-preservation. It must have felt the impulse to seek nutrition and the power of locomotion; and it must have possessed the power of digestion and assimilation, or it could not have lived. It must have felt the impulse to perform the function of reproduction, or there could never have been a second moneron, and so on. In short, the very first sentient being that appeared on earth must have possessed such a knowledge of the essential laws of its being as were necessary to preserve its own life and to perpetuate its species, or the progress of organic evolution would have been forever arrested at the very threshold of sentient existence.

This is a self-evident proposition; and no refinement of sophistry can weaken its force. No vague speculation as to the possibility of tracing its ancestry back through the vegetable to inorganic matter can destroy its significance. Trace it back as far as you will, the same principles hold good, and the same crucial question arises, and that is this:

Where is the antecedent mind capable of transmitting

the essential attributes of omniscience and omnipotence to the first sentient being on this planet?

There is, and there can be, but one rational answer. It is self-evident that such qualities must be inherited from a Being who possesses them,—an Almighty, All-wise Creator.

Thus far I have spoken only of the intellectual powers and the dynamic energy of God; and thus far we find that they correspond exactly to the conceptions of Christianity. But there are other attributes with which Christian faith has invested the Supreme Being. Jesus told us of a God of love, mercy, and benevolence,—the Universal Father. Science confirms the latter declaration, for it traces the ancestry of Man, in one unbroken line, back to that Universal Father. This demonstrates, what scientists have thus far failed to note, that the law of heredity is universal. That is to say, it is not confined to race or species; nor is it confined to the earthly plane of existence. Thus, we have traced the power of intuitive perception of essential truth back through the protozoa to Omniscience; and we have traced the kinetic energy which is inherent in the soul of Man back through the protozoa to Omnipotence.

This is demonstrative of the truth of the following proposition:

Whatever faculties are found to exist in the subjective mind of any sentient being necessarily existed, potentially, in the ancestry of that being, near and remote.

This is axiomatic, and its truth will be instantly perceived and assented to. It follows that whatever faculties are found to exist in the soul of Man existed potentially in all its ancestry, and actually in all its

ancestral minds that were sufficiently developed to manifest them.

It is a corollary of this proposition that whatever faculties we may find to exist in the subjective mind of Man must necessarily exist, potentially, in the mind of God the Father Almighty.

We may, therefore, confidently revert to that congeries of faculties and powers which science has demonstrated to be inherent in the subjective mind of Man.

Before doing so, however, I desire to invite your attention again to the inductions and deductions upon which the great lights of evolutionary science lay the greatest stress. I allude especially to such scientists as Haeckel, who fancy that they have eliminated God from the Universe by proving that Man was not specially created out of nothing, but is simply the product of organic evolution.

One great law upon which they build their superstructure is that of heredity. Upon that they lay the greatest stress, declaring it to be a universal law, and in the end seek to prove that it is not universal. Thus, they trace the ancestry of Man, through an unbroken series of gradients, back to the moneron. They even descant upon the wonderful psychic powers of that organism, and trace the development of those powers up to man. Haeckel declares, truly, that Man's place in nature can never be accounted for on any other hypothesis than that of hereditary transmission and development from that unicellular organism. But when asked "whence comes that God-like intelligence with which the moneron is invested?" he abandons the hereditary hypothesis and tells us that it can be accounted for only on the theory of "spontaneous generation."

"Spontaneous generation from what?" you ask. From inorganic matter, of course. Can matter think? The question answers itself.

His scientific attitude is this: he adheres to an immutable law up to a certain point — the crucial point — and then abandons it in favor of a palpable absurdity.

His logical attitude is even worse; for he has committed the one unpardonable sin for which all guilty logicians are, or ought to be, cast into outer darkness. When he declares that the intelligence evinced by the moneron is the result of "spontaneous generation," he simply begs the question. For that is the very question at issue between the Christian evolutionist and the atheistic or agnostic evolutionist. At that point comes the parting of the ways. And it cannot be denied that the Christian evolutionist has decidedly the advantage in the argument; for it is yet to be shown that such a phenomenon as spontaneous generation of life is possible. It has often been tried, but the experiment has never yet succeeded. On the other hand, the Christian evolutionist can well place himself squarely on the proposition that the law of heredity is universal and immutable; and that intelligence in any sentient creature presupposes an antecedent intelligence transmitted under the universal law. Moreover, he may reinforce himself with that other axiom that "a stream cannot rise higher than its source"; and further, that "nothing comes from nothing." All these laws and axioms must be set aside as idle verbiage if we are to suppose that the God-like intelligence of the moneron did not proceed from an infinite antecedent Mind, and not from a fortuitous chemical compound of inorganic matter.

Another favorite argument of the agnostic evolu-

tionist is based on the ontogeny of the germinal cell of Man. They tell us, what is undoubtedly true, that the ontogeny of the human embryo is a repetition of the salient features of the phylogeny of the primordial germ. That is to say, the human embryo begins as a unicellular organism, and the stages of its development correspond to the principal steps in the development of animal life from the moneron to Man. This is one of the strong points of evidence insisted upon by evolutionists in favor of the evolutionary hypothesis. It cannot be denied that its evidential value is immense. But its true value has never yet been measured by those who have most strongly insisted upon it. Like the argument from heredity, when carried to its legitimate conclusion it is all but demonstrative of the existence of the God of Christian faith. Thus, the human embryo, in its first stage of existence is a unicellular organism, microscopic in size, and differs in no perceptible respect from the embryo of any of the lower mammalia. But there is a difference between the human germinal cell and that of one of the lower mammalia; for one is endowed with the potentials of a human organism and the other is not. No instruments known to science can enable one to detect the difference between the two. As between two germinal cells there is but one way by which any one can know which of them is endowed with the potentials of a human organism, and that is by ascertaining the parentage of the two cells. In other words, the human cell is endowed with the potentials of a human organism because it had its origin in a human organism.

Now let us begin at the other end of the line of heredity. When a scientist beholds a human being he

knows the ontogenetic history of that being, from the germinal cell up to the fully developed man. By analyzing the faculties of that being, he can say with certainty just what faculties were possessed by the parent organism in which the germinal cell had its origin.

These are all self-evident propositions—in fact, truisms. But now let us carry the same process of reasoning into the phylogenetic series. When an intelligent evolutionist beholds a man, he can recite the steps of his development from the moneron upward to the fully developed man. He knows that the unicellular organism from which he was descended, in the phylogenetic series, was endowed with the potentials of manhood. He knows that, because he can trace the line of its development from the moneron to Man.

But how did it happen that the moneron became endowed with the potentials of a human organism? This is the crucial question. Haeckel, in common with all other atheistic evolutionists, tells us that it was by spontaneous generation. That is to say, at that crucial point he abandons his comparison of the phylogenetic series with the ontogenetic history of the human embryo.

We have seen that the human germinal cell contained the promise and potency of a human organism solely because it had its origin in a human organism. In other words, there was an intelligence antecedent to the germinal cell, which was endowed with faculties identical with those of the organism that was developed from the cell. It is self-evident that the germinal cell could not have developed into a human organism had there not been an antecedent intelligence at least equal to the

human intelligence from which the human germinal cell derived its potentialities.

Carrying the comparison to its legitimate conclusion, therefore, we must suppose that there was an antecedent intelligence back of that of the moneron at least equal to the intelligence that eventually developed from the moneron. In other words, since we know that the moneron was necessarily endowed with the potentialities of a human organism, we also know that there must have existed an antecedent intelligence at least equal to a human intelligence. Otherwise, we must suppose that something can come from nothing, and that a stream can rise higher than its source.

It will thus be seen that the essential law of evolution, namely, heredity, and the strongest argument in favor of that hypothesis, namely, the comparison of the ontogeny of the germinal cell with the phylogeny of the species, each, when carried to its legitimate conclusion, leads inevitably to the Living God as the only tenable explanation of the facts of organic evolution.

Bear with me while I carry the ontogenetic argument one step further. I have already shown that an analysis of the faculties of Man necessarily reveals the faculties of the parent organism of the germinal cell of Man. This is self-evident. Now if an analysis of the faculties of Man's immortal soul in like manner reveals a God-like entity, antecedent to the moneron, the evidential value of the facts we have considered will be enhanced a thousand-fold.

Let us turn, then, to the table exhibiting the faculties of the subjective mind, and see what evidence they afford of the Living God — what proofs they present that Man was made in the image of God.

Now, do not for a moment imagine that I am going to present an anthropomorphic conception of the attributes of God. Such conceptions are common enough; but they always arise from an attempt to realize the attributes of God from a contemplation of the objective man, or, at best, of the faculties of the objective mind. It is obvious that a multiplication by infinity of the power of inductive reasoning would not relieve the conception of its anthropomorphism. Induction is a method of inquiry. A God possessed of infinite powers of induction, therefore, would be a God of limited intelligence, an infinite inquirer, — an infinite searcher after information. Our boasted "God-like Reason" is of the earth earthy, — the very antithesis of omniscience.

Now, let us turn to the mind of the soul; the mind which antedates the objective mind by untold millions of years; the mind which is our heritage direct from omniscience; the mind which bore the sign-manual of Divinity when it first appeared on this earth.

Intuition heads the list — the power of immediate perception of Essential Truth, a power that is antecedent to and independent of reason, experience, or instruction. Then follows inerrant Deduction — the power to correctly interpret the laws and truths that are intuitively apprehended, and follow them to all legitimate conclusions. Add to these two faculties a perfect memory, and multiply the sum total by infinity, without changing the essential character of either, and the product is Omniscience.

Descending now to the bottom of the list, we find Kinetic Energy, — the power of moving and being moved; of moving ponderable bodies without physical

contact or appliances; the power that controls the physical forces of nature, and enabled Jesus and Peter to walk upon the water. Multiply this power by infinity and the product is Omnipotence, that Infinite Energy that controls the correlated forces of nature, assembles matter, and creates a Universe.

With a difference only of degree, therefore, we find in the soul of Man every essential attribute of Omniscience, and every power of Omnipotence.

Turning now to the emotional nature of Man, we find that which purified and increased by the sum of infinity, gives us a God of infinite love, mercy, and benevolence.

Last, but by no means least in importance, we find the faculty of telepathy, which we must suppose to be a divine potential. Science pauses here and asks this question, which each must answer for himself: Does not the possession of this faculty involve the logical deduction, not only that it is the obvious means of social communion in the future life, but that it is the ever open channel of communion with God through prayer; and not only that, but is it not the potential agency of divine inspiration?

These questions each must answer for himself in the light of the evidence before him. But of one thing we may be certain, when I tell you that it has been demonstrated that two persons, as far apart as the antipodes, can communicate by means of telepathy just as easily as if they were in the same room; and that the power thus manifested, when expanded to infinity, is Omnipresence.

If, therefore, the intuitions of the prophet of old were inerrant; or if he was divinely inspired, when he de-

clared that "Man was made in the image of God," we know that God is an Omniscient, Omnipotent, Omnipresent God of Love, Mercy, and Benevolence; for we find in the soul of Man each of these divine attributes, differing only in degree.

II

SCIENCE AND THE FUTURE LIFE

IT is a curious fact that, in the so-called "conflict between science and religion," the materialistic scientists owe the greater part of their popular polemical successes to unwise concessions or admissions, made by those who represent the religious side of the controversy. Thus, when the doctrine of evolution was announced and was found to conflict with the literal interpretation of the Mosaic history of the creation of organic life, materialists were instant in the claim that science had eliminated God from the universe, and the Church, instead of seizing upon the indisputable facts of organic evolution and giving them a rational theological interpretation, virtually admitted that if the doctrine of evolution were sound, the claim of materialism could not be successfully controverted.

Having made that admission, it felt compelled, in the interest of religion, to deny the facts of evolution, and thus was continued the warfare of theology against science, which may be said to have been begun by the murder of Hypatia in the fifth century for teaching mathematics in the schools of Alexandria. The result of that battle between science and religion was that the intelligent youth of Christendom, being taught by materialistic science on the one hand that the facts of evolution disproved the existence of God, and by the

Church on the other hand that science and religion were in deadly antagonism, felt compelled to make a choice of one to the exclusion of the other. Hence the tidal wave of materialism which swept over Christendom during a portion of the last century. The facts of science could not be ignored, and whatever was supposed to antagonize them necessarily had to yield. Happily, wiser counsels now prevail, and it is beginning to dawn upon the more intelligent portion of the Christian Church that a rational interpretation of the facts of organic and mental evolution demonstrates the truth of the essential doctrine of Christianity.

Again, the Christian doctrine of the future life has suffered alike from the assaults of materialistic science and the admissions of the Church. Thus, materialists tell us that the facts of their science all tend to disprove the doctrine of the immortality of the soul; and that there are consequently no facts by which that doctrine can be inductively established. They tell us that if man has a soul it is the mind; that the brain is the organ of the mind, and that consequently when the brain perishes the soul is extinguished. They have explored the brain and definitely located some of its most important centres; and they have demonstrated that, by removing portions of it, corresponding faculties of the mind are extinguished; and that this process can be continued until the whole of the brain intelligence is blotted out.

Arguing from these demonstrable facts, they tell us that they have, step by step, extinguished the human soul by experimental surgery, and thus demonstrated that its very existence depends entirely upon the maintenance intact of the brain structure. The conclusion,

of course, is that not only is it impossible to prove the immortality of the soul by induction, but that all the facts of physical science conspire to demonstrate its impossibility.

This, then, is what materialistic science has had to say, and still says, of the problem: "If a man die, shall he live again?" And it must be said in all candor that if its fundamental premises are true, its argument is unassailable. Moreover, it must be stated that, up to within a decade, its premises were not seriously disputed, even by those who did not fully share its conclusions. In fact, it was generally admitted, even by the most ardent believers in the promises of the Master, that the fact of the future life was not susceptible of inductive verification. They did not, of course, admit that science had demonstrated the impossibility of a future life, even though compelled to recognize the facts upon which science based its calculations; but took refuge in the assumption that there were two orders of truth in the universe, namely, religious truth and scientific truth, each being antagonistic to the other.

It is, however, no part of my purpose to analyze the old arguments for, or grounds of belief in, the immortality of the soul further than to remark upon the sublime faith in the promises of the Master which has kept it alive in the breasts of his followers, in spite of the seeming demonstrations of materialistic science. I merely wish for the moment to draw attention to the fact that, up to within the last decade, believers and disbelievers respectively admitted and asseverated with practical unanimity that science is powerless to prove the fact of a future life. In saying this I purposely omit spiritism as "a thing apart."

My present purpose is to inquire whether it is true that so momentous a problem is incapable of solution by the processes of induction, my firm belief being that man can eventually learn by that process everything that it is important for him to know. Facts are nature's divine revelations — the sign language of the Omnipotent — the very words of God; and reason is their divinely commissioned interpreter. All facts are consistent with one another, and, properly interpreted and sufficiently aggregated, they point with unerring certainty to ultimate truth.

In other words, facts constitute the only valid basis of reasoning. The validity of the conclusions, however, depends entirely upon the proper interpretation of the facts; and that in turn is possible only when a sufficient number of facts have entered into the calculation. It is true that one may come to a correct conclusion from one fact alone, but that is rare, and it savors of a higher faculty — that of intuition. But in pure inductive reasoning the only safe method is to suspend judgment until the largest possible number of facts have been collected and properly classified. The obvious reason is that, in the absence of a large number of facts, a proper classification is always uncertain, and often practically impossible, and in the absence of a valid classification one is liable to draw his conclusions from facts which have little or no pertinency. The validity of an induction, however, depends not so much upon the number of facts considered as upon their pertinency.

My excuse for drawing attention to these elementary principles of inductive investigation is, first, that it is always well to recur frequently to first principles; and, second, because I intend to apply them to the old "sci-

entific" method of investigating the problem of a future life, before proceeding to state the fact upon which I rely to establish its reality.

I have already stated that the materialistic scientists have relied upon the facts of cerebral anatomy and experimental surgery to prove that the soul of man perishes with the physical body. I have admitted their facts and the results of their experiments, and I have said that if their fundamental assumptions were true, their conclusions could not be successfully controverted. This is but another way of saying that if their premises are true, their experimental facts are pertinent to the issue; but if their premises or assumptions are not true, the facts upon which they rely are foreign to the subject, and their conclusions are, therefore, necessarily unreliable. It becomes, then, of first importance that we should test the soundness of their fundamental assumptions.

In strict justice to all concerned it must be stated that the mistakes of materialistic scientists were not due to any false method of reasoning. Their methods were inductive, and their experiments were scientifically exact; but they were not pertinent to the issue. Nor was this due to individual ignorance of logical methods, but to the then prevailing ignorance of anything like a scientific psychology. It was due, in short, to the old psychology—which was a psychology minus the "psyche"—a "science of the soul" founded upon a profound ignorance of the soul. It was the scientific equivalent of the proverbial "play of the 'Prince of Denmark' with the part of Hamlet left out."

Under such a psychology materialism assumed, and had a right to assume, that the mind which could be

reached with a saw, and the faculties of which could be eliminated with a scalpel, constituted the only mental organism with which man was endowed; and that when that mind was thus destroyed the soul was exterminated. Science then knew of no other mind than that of which the brain was the sole organ. The law of mental duality had not been discovered; and hence there was no possible means of knowing that man had a soul or a mental organism whose existence and phenomenal manifestations were not dependent upon the integrity of the brain structure.

The new psychology, however, throws a flood of light upon man's mental organism in general, and in particular upon the attributes and powers of the human soul. It reveals in man the possession of a dual mind, or what is the practical equivalent of two minds, since each is endowed with distinct faculties, powers, and limitations which are not shared by the other.

The distinctive faculties, powers, and limitations of the two minds will be clearly differentiated when we come to point out the facts which indicate the future life. For present purposes it must suffice to say, provisionally, that the mind of which the brain is the organ possesses only those faculties which pertain to a purely physical environment; and, being dependent upon the brain structure for its ability to manifest its powers, it necessarily perishes with that organ. The subjective entity, on the other hand, is endowed with faculties and powers that especially adapt it to a disembodied existence, and the brain is not its organ. This is to say, its higher manifestations are made independently of that organ. The conclusion is inevitable that the subjective mind is the mental organism of the soul.

It follows that materialistic science was mistaken: (1) in the assumption that the objective mind constitutes the mental organism of the soul; (2) in assuming that the brain was the proper field for exploration in quest of the soul; (3) in the supposition that saws, scalpels, or other tools are reliable instruments of precision for testing the question of immortality. Their conclusions were, therefore, valueless to science. They had followed the inductive method, it is true, and their experiments were carefully and skilfully conducted, but their facts were wrongly classified, and were, therefore, not pertinent to the issue they were attempting to decide.

Materialistic science has, therefore, left the question of a future life exactly where it found it. It has confused the minds of many, promoted skepticism, and discouraged believers from indulging in the hope that science can ever verify the promises of the Master. But that is all. It has not disproved it, and that of itself is good ground for hope, especially when we remember that it has not yet considered a single fact that is pertinent to the real question of the survival of the soul after the death of the body.

It is an axiom of science that knowledge of a law of nature enables its possessor to reconstruct the past and predict the future with unerring certainty. Thus, the discovery by Kepler of the three laws of planetary motion enabled Newton to formulate the law of gravitation, and that discovery in turn enabled one of his successors to discover and definitely locate a planet that at the time was invisible even with the help of the most powerful aids to vision then existing. But its existence and its location in the heavens were just as certain to

the mind of the scientist then as after the hypothetical planet became a visible reality through the aid of the more powerful telescopes that were subsequently constructed.

This axiom is as true of the laws of the mind as it is of those of the material universe, the difference being that in the former the previsions cannot always be objectively verified. They are just as certain, however, in the one case as in the other if we give credit to that universal axiom of science affirmative of the "constancy of nature." Thus, while the axiom "There can be no faculty of the mind without a function to perform" may not, in the strictest sense, be called a law of nature, it has the force of one, in that it is what Herbert Spencer would call "a universal postulate," because "its opposite is inconceivable" — unthinkable. It is, therefore, as safe a proposition to reason from as the theorem of Newton. It is, indeed, the psychological equivalent of the axiom of physiological science which postulates a function for every organ of the body. So true is the latter proposition that even the vocabulary of materialistic science is unequal to the discussion of physiology in other than terms of "design."

This, then, is the psychological proposition upon which I shall base my argument for a future life: There can exist no faculty of the human mind without a use or a function to perform, somewhere, or at some time, in the life of the individual. This, I repeat, is a "universal postulate," for its opposite is inconceivable. It is self-evident, and therefore requires no argument to sustain it.

It will at once be seen that the bearing of this proposition upon the question of a future life is entirely dependent upon my ability to show that man is endowed

with faculties of mind that perform no normal function in this life. If that can be satisfactorily shown I shall have a right to assume that such functions will be performed in the future life; *a fortiori* (with stronger reason) if it can be shown that those faculties and functions are not adapted to the normal uses of this life, but are obviously adapted to a disembodied existence. All this, and more, I shall attempt to show by the aid of what is now known as man's psychological endowments.

I have already stated that the new psychology teaches us that man is endowed with a duplex mental organism, or what seems to be two minds, objective and subjective; and that each is endowed with faculties not shared by the other. I also stated, provisionally, that the subjective mind is the mental organism of the soul. It remains to point out the facts which seem to justify these assumptions.

Beginning with the objective mind, the mind of ordinary waking consciousness, it is found that it possesses but one distinctive faculty. That is to say, it possesses but one faculty that is not shared by the subjective mind, and that is the power of independent induction. The subjective mind is destitute of that power. In other words, it cannot institute an independent line of scientific investigation by collecting a mass of facts and reasoning from them up to general principles or laws. This is the distinctive limitation of power in the subjective mind which differentiates the two, all other points of differentiation being due to limitation of the powers of the objective mind. This subjective limitation is due to the law of suggestion, and it is generally expressed in the formula: "The subjective mind is constantly amenable to control by the power of sug-

gestion." This is the equivalent of saying that it is compelled to take its premises from extraneous sources, and is hence incapable of independent induction.

All other powers of the objective mind are shared by the subjective; as, for instance, the power of deductive reasoning. Deduction is, of course, a necessary concomitant of induction, inasmuch as the reasoning process consists in alternate induction and deduction. That is to say, induction reasons from a collection of facts up to general principles, and deduction reasons down from general principles to particular facts, and both are necessary means of conducting scientific inquiry. Deduction is, therefore, necessarily a faculty of the objective mind, and, as before remarked, it is shared by the subjective, the difference being one of degree. It is inherent and potentially perfect in the subjective mind, but in the objective it is dependent upon brain cultivation.

The other powers of the objective mind may be all classed under the head of memory. It is itself destitute of emotion, having only memories of emotional experiences. The emotions belong exclusively to the subjective mind, where they were located in the beginning of organic life, æons before the brain was evolved in the process of organic evolution. The power of memory is also shared by the subjective mind, the difference again being one of degree. That of the objective mind, being dependent upon the development and constant refunctioning of brain cells, is necessarily very imperfect; for the atrophy of a brain cell destroys a brain memory, whereas the memory of the subjective mind, not being thus dependent upon the integrity of a physical organ, is absolute. It not only retains in perfection

all that it receives during the lifetime of the individual, but it is endowed with a fund of ancestral memories which reappear in the phenomena of heredity and instinct.

It will thus be seen that the objective mind is endowed with but one generic faculty, namely the power of induction and its necessary concomitants — deduction and memory. In other words, it is pure intellect. It is the faculty of judgment and discrimination — the ability to estimate the values of facts in their relations to each other, the mental instrumentality by which man grasps the laws of nature and enslaves her forces. It is, in short, the one faculty of mind that is adapted to man's use in his struggle with the vicissitudes of an imperfect physical environment, in a world that is in its formative stage, physically, mentally, and morally. It is profoundly significant that the brain — the sole organ of the objective mind — is a product of organic evolution. Like all the other physical organs, it was evolved in response to a necessity of organic life, and obviously to assist its possessor in the struggle for existence. In a word, the brain is a highly specialized physical organ, the functions of which pertain solely to this life, as will more fully appear hereinafter. Organic life on this planet was more than half as old as it is now before an animal with a brain made its appearance. The subjective mind, therefore, antedated the objective by untold millions of years, for the former existed in potential perfection in the lowest unicellular organism — the earliest and humblest of man's earthly ancestors.

Let us now examine the salient features of man's subjective powers and faculties, first, with a view to ascertaining whether they seem to fit him for a higher plane

of existence; and, second, whether they reveal in man the possession of faculties and powers that perform no normal function on the earthly plane.

First in the natural order of treatment is the faculty of intuition, which is possessed exclusively by the subjective mind, the objective not being endowed with any power remotely akin to it. By intuition I mean the immediate perception of truth, general principles or laws, antecedent to and independently of reason, experience, or instruction. It is that mysterious faculty which in animals is called instinct. Its higher manifestation in man is called intuition, or intuitive perception of truth. But it is the same generic faculty, and it is as fully developed in the lowest unicellular organism as it is in the highest order of manhood, the difference being of degree and character of manifestation. Beginning with the moneron, and ascending through all the gradations of animal life to man, it is developed in exact proportion to the wants, necessities, and stage of development of each species. In the lower animals it manifests itself in those acts which serve to protect the individual and to preserve the species. In man it is sporadically manifested in men of genius and other prodigies, and in its highest manifestations it reaches into the realm of the human soul and reveals its origin, its destiny, and the laws of its being.

In the lowest order of animal life—the moneron—that physical “organism without organs,” as Haeckel calls it, the divine origin of life and mind is more clearly revealed than in any other phenomenon of sentiency, for its mental attributes, as revealed by its instinctive acts, proclaim its kinship to omniscience in language that cannot be otherwise interpreted. Thus the instinct of the

moneron reveals an intuitive knowledge of the laws of its being, and this is all that can be said of omniscience. The difference is one of degree and is proportioned to the state of development and environment. Heredity from earthly ancestors cannot be invoked to account for the possession of that faculty in the moneron, for it had no earthly ancestors. But as heredity is the only known method of transmitting subjective faculties, we are forced to the conclusion that it was a direct inheritance from the divine mind. And this view is strengthened by the obvious fact that the heritage is the essential attribute of omniscience.

It is an axiom of the science of organic evolution that the potentialities of manhood reside in the primordial germ. Atheistic scientists affirm this with insistent iteration — and it is unquestionably true. But it is also true that the very facts upon which atheistic science relies to prove its axiom also proclaim, with stronger reason, the divine origin of the life and mind in evidence in the primordial germ, and thus reveal in it the potentialities, not alone of manhood, but of an immortal soul. I submit that the inheritance of the potentialities of the divine attributes of mind presupposes the inheritance of the potentialities of the divine continuity.

It will thus be seen that at the very threshold of organic life on this planet the subjective mind appeared, and that it was endowed with the divine power or faculty of intuition, — a faculty which enables its possessor to know, by immediate apprehension, all essential truth pertaining to his stage of development and his environment; a power that as far transcends that of induction as the light of the sun exceeds the light of the humblest of the heavenly bodies.

Man boasts of his "God-like powers" of inductive reason. But it is anything but God-like. An omniscient God cannot reason inductively. Why? Because induction is an inquiry—a slow and painful method of searching for information—a systematic effort to find out something that the inquirer does not know. It is, therefore, a contradiction in terms to say that an omniscient God can reason inductively. God knows all things by virtue of his powers of intuition, and he has transmitted those powers to the souls of his children in exact proportion to their requirements.

It will now be apparent to the intelligent reader why I have said that the one distinctive power of the objective mind is especially adapted to the requirements of an imperfect physical environment—to a world that is in its formative stage—and to no other. It would be superfluous—impossible—to a mind endowed with the power of intuitive apprehension of first principles or laws. Assuming, then, for the moment, a future life for the souls of men, it is obvious that they are intellectually well supplied for a far higher plane of existence than this. Other faculties of the soul which serve to complete an ideal mental equipment for a disembodied existence will appear as we proceed in the enumeration of faculties which perform no normal function in this life.

In saying that the subjective mind is endowed with faculties which perform no normal functions in this life, I must not be understood as saying that none of its faculties are adapted to the uses of this plane of existence. On the contrary, the life itself of the body depends upon the continuous performance of some of the functions of the subjective mind. Its purely bodily

functions seem to pertain exclusively to the preservation of the life and health of the body, and to the perpetuation of the species. These need not be considered in this paper, as they are only remotely connected with the subject under discussion.

Some of its faculties, however, perform useful functions, under normal conditions, on the lower plane, but seem to manifest themselves only under abnormal conditions on the higher plane. Thus the faculty of instinct or intuition, one phase of which has already been discussed, is the prime conservator of animal life on the lower plane, and its every manifestation is normal and useful to the last degree. But in its higher manifestations, as in men of genius, in mathematical and musical prodigies, and in poets and artists of the subjective types, abnormal conditions of body and mind seem to prevail. Nevertheless, through these higher manifestations we catch occasional glimpses of a transcendent subjective power which certainly is never normally manifested in this life.

While we may not, therefore, be justified in grouping this faculty with those that perform no normal functions in this life, we certainly are justified in so classing its higher functions. Moreover, it must be classed, provisionally, at least, as one of the faculties of the human soul which are necessary to a perfect mental organism — an indispensable factor in an intellectual entity. If, then, we find other faculties which complete the intellectual organism, and still others which are indispensable to a perfect manhood, some of which perform no normal function in this life, but are obviously adapted to the uses of a disembodied intellectual entity, we shall have justified our classification and proved our thesis.

The faculty or power of deduction is next in the order of discussion, for it is as necessary a concomitant of intuition as it is of induction. Both induction and intuition have to do solely with general laws or first principles; and deduction in each case is the method of deriving practical conclusions from the laws thus ascertained. As I have before remarked, the process is slow and painful in the objective mind, and hence frequently incorrect. But there is good reason to believe that the deductions of the subjective mind, from well-ascertained laws, are practically inerrant.

Thus the intuitions of mathematical prodigies enable them to grasp the law of quantities or numbers, and their solutions of problems are, of course, merely deductions from the law. If, therefore, the problem is intricate and instantaneously solved, as it often is, and the solution proves to be correct, it constitutes indubitable evidence, not only that the intuition was exact, but that the deductive power displayed was inerrant.

We have therefore the means of mathematically demonstrating the fact that, under favoring conditions, the intuitions and the deductions of the subjective mind are not only inerrant, but that its processes of mentation are inconceivably rapid. Thus the instantaneous naming of the cube of a number consisting of nine figures by a child who was objectively ignorant of the first four rules of arithmetic is demonstrative of all three of the propositions — exact intuitions, inerrant deductions, and rapidity of mentation.

What are the prerequisite conditions for the exhibition of such transcendent powers of the human soul is not yet known to science except in a very general way. All that is known with any degree of certainty is that such

phenomena are produced only under abnormal conditions, involving at least a partial and generally a total suspension of the objective faculties. It is also known that normally such powers are submerged beneath the threshold of objective consciousness—hidden by a fleshly investiture—buried under the normal dominance of the objective mind.

I submit, therefore, that we have a logical right under the strictest rules of scientific induction to infer, first, that in its higher aspects intuition performs no normal function in this life, induction being amply sufficient to enable us to cope with the vicissitudes of a physical environment; and secondly, that when the limitations of our physical investiture are removed those transcendent faculties and powers will perform their normal functions in a perfect mental environment—in a realm where all truth stands revealed. This, I say, we have a right to infer from the observable facts of experimental psychology. But we know that such faculties correspond exactly to man's highest possible conception of the attributes of omniscience, differing only in degree; and from this we have a right to infer the divine origin of life and mind. We know also that such faculties are adapted to the uses of our highest conceptions of a perfect intellectual environment—an environment that is obviously impossible in a material world like this. Again we have a right to infer future uses for such faculties in a realm commensurate to our divine origin and the God-like faculties of the soul.

There remains but one other faculty requisite to a perfect intellectual equipment, and that is memory. This, as we have seen, is possessed in potential perfection by the subjective mind. It is, of course, shared

by the objective mind, the difference being one of degree.

Strictly speaking, therefore, memory cannot be classed as a faculty which performs no normal function in this life. Nevertheless, it seems probable that a perfect memory, such as the subjective mind possesses, would seriously handicap the objective mind in its inductive efforts. Not because of the redundancy of material thus furnished, although that is sometimes embarrassing, but because a perfect memory retains error as vividly as it does truth, which, in the absence of perfectly trained powers of discrimination, is necessarily productive of confusion and error. In point of fact one of the most valuable "powers" of the objective mind consists in its ability to forget. It erases many a grievous error from its tablets which would otherwise form the basis of wrong inductions. It relieves the overcrowded brain of many an unfortunate student from a crushing load of useless knowledge. Most important of all, it enables time to bring to the heart, overburdened with sorrow, respite and nepenthe from the memories of the loved and lost.

Not that a good memory is a thing to be deplored; but a good memory in this earthly environment, where error is ever in deadly conflict with truth, and sorrow is ever present or impending, is one that is tenacious alone of truth and joy. It may be objected that this is beyond our control, but that is a mistaken idea. Cerebral anatomists tell us that every new thought or experience creates a new brain cell or modifies an old one, or both, and that each memory is represented by a brain cell. It follows that, as brain cells are physical organs, memory is dependent upon physical conditions, and

that, like every other physical organ, a brain cell, or memory organ, may be strengthened by exercise, weakened by infrequent refunctioning, or atrophied by disuse, the memory, of course, following the conditions of its organ.

Objective memory, therefore, and its resultant happiness or misery are largely under the control of the individual. The wisdom and beneficence of such a limitation of the powers of objective memory, in an imperfect physical, moral, and social environment, are too obvious to require further comment. It is also obvious that a perfect memory, such as the subjective mind possesses, would constitute a burden too grievous to be borne by mortal man. In other words, a perfect memory is not adapted to the uses of this life. Even from an intellectual point of view the rule holds good. Thus, an imperfect memory, that is to say, a memory the retentiveness of which is largely under the control of the individual, is a necessary concomitant of our powers of induction; for that, whereas induction enables us to "prove all things," the power to forget enables us to "hold fast" only "to that which is good." By "the power to forget" I mean the power, by inattention, to render error and sorrow the least conspicuous factors in our minds and our lives. I submit that the power to forget is among the most valuable of man's earthly endowments, and that it is a conspicuous example of divine mercy and benevolence.

On the other hand, postulating a future life, there are many reasons why the mind of the soul should be endowed with a perfect memory, among the most obvious of which are the following:

It is a necessary concomitant of the soul's transcen-

dent powers of intuitive perception or apprehension of the laws of nature and its infinite powers of inerrant deduction therefrom. Obviously the purely intellectual equipment of the soul would be incomplete without a memory commensurate with its concomitants; and with that endowment, an intellectual entity is revealed whose powers are comparable only to omniscience.

Again, postulating a future life, the perfect memory of the soul definitely settles another question of transcendent interest and importance to mankind. The question whether we shall retain our individuality in the future life is, to most people, the equivalent of the question of immortality itself. Manifestly, the non-retention of personality would be the equivalent of annihilation. The hopes and doubts of mankind therefore centre themselves in that supreme problem, "If a man die shall he *consciously* live again?" That the observable phenomena of the subjective mind afford abundant affirmative evidence will appear upon reflection that the retention of personality or individuality always depends upon consciousness and memory. A perfect memory, therefore, is demonstrative proof that the individual possessing it is intensely conscious of his own personality.

Without presuming to invade the domains of theology, it may be said that the perfect memory of the soul throws a flood of light upon the question of future rewards and punishments. That is to say, a perfect memory affords an efficient means by which rewards and punishments follow as a consequence of deeds done in the body, just as violations of physical laws are followed by consequent punishments.

The memory of the subjective mind never has been

and never can be made available for the practical uses of mankind, for the reason that, normally, it is submerged below the threshold of objective consciousness, and rises into view under abnormal conditions only. The sporadic cases in which the power is in evidence serve but one useful purpose, — that of revealing to man a knowledge of his origin and his destiny.

I submit that in the perfect memory of the subjective mind we have a faculty that performs no normal function in this life, but one that clearly is adapted to the uses of a higher plane of existence, and to no other.

Thus far we have touched upon only those faculties of the soul which pertain to a purely intellectual life. If these comprised the sum of the faculties which contain the promise and potency of the future life, mine would be a thankless task, for a purely intellectual life would fail to satisfy the most intense longings of the human soul. Man, who has lived and loved and lost, longs to be assured of a reunion with those who have gone before. If therefore we can discover in the soul of man such faculties as are essential to a social life, together with the means of enjoying both social and intellectual intercourse, we shall have revealed the essentials of a perfect manhood, endowed with God-like powers and potentialities, and satisfied the highest aspirations of the human heart.

It is safe to say that no true lover of his fellow-men, no matter in what form his love may find expression or gratification, would regard as a boon the continued conscious existence of the soul after the death of the body, in the absence of the assurance that his affectional emotions would find appropriate expression under the

changed conditions. Indeed, it may be safely assumed that to the normally constituted man or woman a life without love would seem equivalent to annihilation. Few are so abnormally intellectual as to be able to look with complacency upon the prospect of an eternity of purely intellectual activity, unrelieved by the normal exercise of those emotions which in this life furnish the only tangible excuse for being. But even the few thus constituted may find reasonable ground for hope in the facilities for purely intellectual enjoyment afforded by the faculties of the soul which we have already examined. Verily they should have their reward, and fortunately they will not be missed from the social circles presumable from the existence in the soul of the prerequisite faculties.

The normal man, on the other hand, will welcome the assurance that the subjective mind is the seat of the affectional emotions. This may startle those who have been taught that there is something inherently bad in the so-called "carnal emotions"; that they belong to the body and not to the soul, and the only way to "purify" the human soul is to utterly crush out all its salient natural emotions. The absurdity of this idea can best be appreciated by imagining an emotionless, — I will not say "human soul," for that would involve a contradiction in terms, — but an emotionless entity, masquerading in heaven as a representative of the human race. No sane person would care to make the acquaintance of such a being, much less to be one, even under comparatively favorable climatic conditions.

The particular emotion upon which the greatest stress is laid by such philosophers is what is called the "sexual" instinct. They argue that it is a purely bodily

function, pertaining solely to this world, and consequently can have neither place nor function in the purified human soul. The fallacy of this argument consists in the fact that it is based upon premises fundamentally wrong.

There is, in point of fact, no such instinct, *per se*, as "sexual instinct" or emotion. What is loosely designated as such is, in its last analysis, the parental instinct, the instinct of reproduction. It has no other legitimate use and it performs no other function in the economy of nature. Its perversions alone are responsible for its evils and its name. Rightly understood, and legitimately functioned, therefore, it ranks among the purest and holiest emotions of the human soul. It is a divine heritage from God, the Father, whose highest attribute is parental love. It is, therefore, in its very essence purely altruistic, for its every act is a sacrifice of self for the lives of others, for the benefit of future generations. Beginning with the primordial germ, it constitutes the prime factor, not only in the perpetuation of organic life and the preservation of species, but, in its last analysis, it constitutes that "constant force within," which originates species and compels the progressive development alike of organic life and of human civilization.

Parental instinct, therefore, is an emotion of the soul. It is the oldest emotion of organic life, and the progenitor of all the other affectional emotions,—all others being resultants and auxiliary thereto. It is not of the brain, for it was the prime factor of organic life æons before the brain was evolved. The brain, as before remarked, merely serves to register conscious emotional experiences for the uses of induction.

The emotions cannot be classed with those faculties

which perform no normal functions in this life, for they are the prime factors in the earthly life of men as well as of animals. They are referred to in this connection, first, because they are faculties of the subjective mind; secondly, because, with the intellectual powers heretofore dwelt upon, they serve to complete a personality of the highest conceivable type, and thirdly, because they contain the promise and potency of social life in the world to come.

There remains for discussion but one other mental faculty necessary to a perfect enjoyment of such a social and intellectual life as seems possible to beings thus endowed, and that is a means for the interchange of thought. Without such facilities the essential factor of social life, as man can conceive of it from his experience, would be absent.

Once more experimental psychology furnishes a conspicuous example of its value as an aid to the inductive solution of the problems of the soul. When it first compelled science to recognize telepathy, or thought-transference, or mind reading, as a power of the human mind, a great step was taken toward the solution of many mysteries of psychic phenomena. But when at length it was demonstrated that telepathy is a power belonging exclusively to the subjective mind the scope of its powers to explain the mysteries of the soul was indefinitely enlarged and apparently extended into a higher plane of existence. The points of its bearing upon the question of a future life may be conveniently summarized as follows: 1. Telepathy is a power belonging exclusively to the subjective mind. 2. It is obviously adapted to the uses of disembodied or unembodied intelligences. 3. It performs no normal function in this life. 4. It

forms the missing link in the chain of evidence furnished by other psychic phenomena, of the existence in man of an entity that is endowed with transcendent mental powers and measureless potentialities.

The first of the above propositions has been again and again attested by the Society for Psychical Research and others eminent in psychic science. Its bearing upon the question of a future life is manifest. Postulating a soul in man, it is evident that its mental organism is the subjective mind, and postulating an immortal soul, we have a right to expect it to be exclusively endowed with the power to communicate its thoughts to other immortal souls, independently of the ordinary channels of sense. And that is just what telepathy is. And that is why I say, in the second proposition, that telepathy is obviously adapted to the uses of disembodied intelligences, and to no others.

The third proposition states a fact that is palpable to every intelligent student of psychic science who is familiar with the invariable outcome of experimental telepathy. It is not adapted to the uses of this life. There are many reasons for this, any one of which constitutes presumptive evidence of the future,—that is, of uses elsewhere. The salient reasons are as follows:

Observable telepathic phenomena are never produced under other than abnormal conditions of the body and of the objective mind. Not that telepathic communications between subjective minds may not be made under normal conditions. Indeed, there is every reason to believe that such communications are practically constant between near relatives and friends. But it does require abnormal conditions in the percipient to enable him to become objectively conscious of the content of

the message, or to translate it into objective terms. That is to say, his objective mind must be in abeyance to a greater or less extent; the vividness of the impression being proportioned accordingly. The highest manifestations occur when the action of the brain of the percipient is wholly inhibited, as in a trance. In such cases it requires the intervention of a third person to make the message available for objective uses. It follows that telepathic messages cannot be made available for such uses under other than abnormal conditions of the percipient.

Even under the most favorable apparent conditions a telepathic message can never be relied upon as veridical, for the reason that the factor of suggestion can never be eliminated with any degree of certainty. Consequently every message that is transmitted from one subjective mind to another is liable to be vitiated by the false suggestions incident to this objective world. This alone would render the faculty worse than useless for the practical purposes of this life. Obviously, a means of communicating intelligence which is liable to be falsified by conditions entirely beyond the control of either the sender or the receiver is worse than useless. The usefulness of telepathy, therefore, as a means of communicating thoughts by and between intelligent entities, depends upon environmental conditions not possible on this plane of existence. On the other hand, telepathy is manifestly adapted to the uses of disembodied intelligences who are endowed with the faculty of intuitive apprehension of all truth pertaining to their plane of existence.

I submit that I have redeemed my promise to show that the subjective mind of man is endowed with faculties that perform no normal function in this life. If,

therefore, the fundamental postulate is true, namely, that there is and can be no faculty of mind without a function to perform, either in this or in a higher plane of existence, I have logically demonstrated my thesis. I have not only shown that man is endowed with faculties that perform no normal function in this life, but I have shown that those same faculties are exactly adapted to the uses of disembodied intelligences, and I have also shown that these faculties exist—not in the mental organism of which the brain is the sole organ—but in a mind that existed in potential perfection in the primordial germ, a mind that in its lowest estate exhibits powers that can be adequately described only in terms that are definitive of omniscience, and that, in its highest earthly development, contains the promise and potency of a deathless life.

Moreover, in doing so I have not departed from the strictest canons of induction, for my conclusions have all been derived from the demonstrable facts of experimental psychology. I do not say that the argument is complete, for I have selected only the salient facts from a congeries of phenomena all pointing to the same conclusion.

For instance, did my space permit, I could easily point out a series of phenomena which demonstrate that, as a fact in nature, man's subjective powers are equal to the exercise of an active force beyond the limit of the bodily powers, thus raising the presumption, if not actually demonstrating, that the soul is capable of maintaining an existence and exercising its powers and functions independently of the bodily organism. Telepathy is an illustrative example of my meaning, as its powers are not circumscribed by space limitations; and

telekinesis, or the power to move ponderable bodies without physical contact or appliances, is demonstrative of the power of the embodied soul to "exercise an active force, directed by intelligence, beyond the limit of bodily powers."

No one will deny that the possession of these two powers by an entity such as we have described raises the presumption, in the absence of proof to the contrary, that an intelligent entity thus endowed is capable of surviving the death of the body which it inhabits. Nor will it be denied that this presumption is vastly reinforced by the fact that telekinesis performs no normal or useful function in this life. Its phenomena are rarely produced—never except under intensely abnormal conditions and in pursuance of powerful, though usually false, suggestions. Nevertheless, it has an appreciable value to mankind, in that it furnishes indubitable evidence of the dynamic energy of the soul, thus completing the category of faculties and powers essential to a complete and perfect manhood.

In conclusion I desire to draw attention to one consideration that should not be lost sight of in estimating the evidential value of the facts upon which my conclusions are based, and that is that all the facts of experimental psychology conspire to verify the doctrine of a future life; and that not one fact of psychology, physiology, cerebral anatomy, or experimental surgery militates in the slightest degree against that doctrine. In other words, all the known facts of nature that are pertinent to the issue conspire to prove the fact of a future life. On the other hand, each and all of the facts relied upon by materialistic scientists to prove that man is a soulless being are utterly irrelevant and impertinent

to the issue involved, and their conclusions are rendered possible only by purposely and persistently ignoring all the demonstrable facts of modern experimental psychology.

If I have succeeded in convincing a reader that the observable facts in nature conspire to invest him with the logical and scientific right to hope for a future life, the first question we shall ask will be, "What are the conditions of the future life?" To this question it must be frankly answered at the outset, No one can tell.

In saying this I do not presume to asseverate that no one has ever known. Jesus of Nazareth, endowed as he was with an intuitive knowledge of the laws of the human soul, doubtless knew. But certain it is that he could not convey the information in terms that could be understood by his followers. At least he did not do so, and it must be presumed that one whose mission it was to "bring life and immortality to light" would have satisfied the natural curiosity of his followers on that point, if the conditions were such as could be expressed in language intelligible to them. The only information which could be vouchsafed was of the most general character. Thus, in the parable of the rich man and Lazarus, he gives us to understand that we will recognize and communicate with each other in the life to come; that there will be a mental punishment for the evil deeds done in this life; that our affectional emotions survive the death of the body, and that spirits of the dead are not permitted to communicate with the living, even for the purpose of warning them of the consequences of sin. But this is all of his recorded utterances that throws any light upon the conditions of the soul after death.

Our conceptions of life are necessarily all drawn from our objective experience, and it is impossible for us to rise above it. Hence each one's conception of heaven corresponds to his highest ideal of a physical world provided with ample facilities for the enjoyment of his highest ideal of pleasure, the central idea being that heaven is an idealized earth, differing from the latter only in the perfection of its environmental conditions.

Two causes have conspired to render this conception practically universal. The first is that we have no other standard of comparison, and the second is the proneness of the primitive mind to reason from such analogies as appear upon the surface, without stopping to inquire whether the analogy is a legitimate basis of induction. I have already remarked elsewhere that reasoning from analogy is necessarily a false method unless it is first shown that the laws governing the two subject-matters are identical, and I have cited, as instances of false methods, Bishop Butler's attempt to prove immortality from analogies drawn from the metamorphosis of the caterpillar, and Averroës's method of proving the opposite by other analogies equally illegitimate. But the protest against that method of reasoning cannot be too often repeated or too strongly enforced, for not only did the older philosophers indulge in it to the manifest disadvantage of their disciples, but it is still a favorite method of "proving the unprovable" among many so-called logicians.

It follows that all the speculations of all the philosophers of all the ages regarding the conditions of the future life that are based upon the supposed analogies drawn from conditions existent in the physical life are

worse than useless in an inductive examination of the subject. Moreover, we know that when people undertake to give us specific information on the subject, — for example, spiritists, — they are simply constructing an imaginary spirit land out of materials that are of the earth, earthy. We know that they are wrong, because we know that their premises are false. That is to say, we know that when they assume to construct a spiritual world out of the material found on earth they are reasoning from analogies that are absurdly impossible. And it may be here remarked that if anything, aside from their fundamentally false method of reasoning were needed to convince one of the utter absurdity of the spiritistic claim to the possession of specific knowledge of conditions in the other world, it would be found in the fact that no two “communicating spirits” agree as to the conditions prevailing in the spirit realm, but all agree that they are analogous to those of the physical world.

It follows that spiritists know as little of the actual conditions of life in the other world as others, and that what those conditions are, no one, even if he knew, could tell in terms comprehensible by mortal man.

It will thus be seen that no one, not even Jesus of Nazareth, has ever been able to give us an approximate notion of the specific conditions of the future life. All that Jesus tells us is in general terms. But it is a noteworthy fact that what he did say as to the future life accords exactly with the inductions of modern science. It is also noteworthy that, if spirits of the dead communicate with the living, Jesus was not aware of the fact. Considering his perfect knowledge of the laws of the human soul, and that it was his mission on earth

to bring life and immortality to light, it seems not a little strange that he should neglect such an opportunity to prove his thesis and at the same time to supply us with exact information regarding the conditions of the future life. But it seems, according to spiritists, that the hysterical women and neurotic children of the present day know very much more about those conditions than Jesus ever pretended to know. The utter worthlessness of their testimony, however, has already been shown.

It must now be evident that, from the very nature of things, it is utterly impossible for man this side of the grave to know anything of the specific conditions or modes of existence in the realm of disembodied intelligences. The reasons, I repeat, are, first, because no inductive analogy can be drawn from physical experiences to disembodied spiritual conditions; and secondly, because we have no standard of comparison outside of our physical experiences and observations.

Nevertheless, we are not left wholly in the dark nor without inductive grounds for the belief that the highest hopes inspired in the Christian breast by the promise of the Master will be more than realized, for, whilst logic and science alike inhibit the process of drawing spiritual conclusions from physical facts, no such inhibition extends to psychological facts and the conclusions derivable therefrom. On the contrary, since psychology is the science of the soul, psychological facts are the only ones from which a legitimate conclusion can be drawn in reference to the status of the soul either in this or the future life. In other words, conclusions relating to spiritual conditions which are derived from physical experiences are necessarily wrong for the reason that the laws of matter and of spirit are not

identical; but, on the other hand, spiritual conclusions derivable from psychological facts are necessarily legitimate because the laws of mind and soul in this world are presumably the same in the other, the constancy of nature being, of course, assumed. The difference, if any exists, would be in the environmental conditions and consequent modes of manifestation, and not in the fundamental laws themselves. We have, then, a logical and scientific right, according to the strictest rules of inductive inquiry, to draw conclusions relating to the status of the soul in the future life from the observable phenomena of the soul in this life; for a psychological fact is as much a fact as the physical universe.

As the intelligent reader has already anticipated, the conclusions must necessarily be of a very general nature, much the same in character as those derivable from the words of the Master; but I hope to be able to supply sufficient data for all reasonable demands for inductive confirmation of the hopes which the words of Jesus have inspired. In doing so I shall be compelled to remind the reader of some of the fundamental principles and facts which have been set forth above. For instance, I have shown that: 1. There is and can be no faculty of the mind without a function to perform either in this or some other plane of existence. 2. That the subjective mind is endowed with faculties that perform no normal function in this life. And I have drawn the conclusion that such faculties must find their legitimate field of activity in the future life, especially since some of them are obviously adapted to a disembodied existence, and to no other. I have also shown that all of the faculties of the subjective mind are adapted to a disembodied existence, albeit some of them are shared by the objec-

tive intelligence, and that, in the aggregate, the faculties and powers of the subjective mind, or soul, comprise a complete and perfect manhood, endowed with God-like attributes, powers, and potentialities.

I have also shown that among those powers are:

1. A perfect memory, which insures the retention of personality and the recognition of one's friends.
2. Telepathy, which constitutes a means of interchange of thought with others.
3. The affectional emotions, which promise a renewed life of love and affection with our kindred and friends, as well as a capacity for forming new ties of love and friendship.

Now the best way of determining what a man will do under favoring conditions is to ascertain what he can do. In other words, it may always be safely predicted that one's mental faculties will find active employment in a favoring environment. Under this rule we know that man, in the future life, will retain his personality, recognize his friends, and enjoy a social existence, because we know that his soul is endowed with all the faculties necessary for that purpose.

A purely social life, however, would come far short of a realization of the Christian's conception of heaven, although it may be included in it. The central idea of the popular Christian conception is that heaven is a place in which the redeemed are perpetually engaged in worshipping and praising God and in the contemplation of his glories. As popularly conceived it is of course purely anthropomorphic, and as such it has been a standing subject of atheistic ridicule from time immemorial. Nevertheless, divested of its anthropomorphism, it would seem to be based upon a fundamental truth.

The fatal objection to the popular conception of the status and occupations of the soul in the future life may

be summed up in the one word "monotony." An intelligent man would prefer annihilation to an eternity of singing, playing on a harp, or even of perpetual worship, in the popular sense of the term. Even the social life which is promised would become monotonous in the absence of any rational occupation.

There are several phenomena, observable in this life, which bear upon the question: 1. The history of mind and soul in this life is one of continuous progressive development, from the moneron to man. 2. The lines upon which the greatest progress is made in the acquisition of knowledge, or the development of the intellectual powers, is in the ascertainment of first principles or laws of nature. 3. The greatest good to each sentient creature results from the discovery of the natural laws pertaining to its being. This is as true of the lower animals as it is of man. 4. The more profound intellectual joy which man is capable of experiencing in this life results from the discovery of a law of nature. This is true, whether the discovery is the result of induction or of intuition. Space forbids the discussion of these propositions at length. Nor is it necessary, for they are self-evident to every man of ordinary intelligence. Let us apply them to the question under consideration.

The first is the most important, for its application involves all the others. We all know that the history of mind on this planet is one of continuous evolutionary development. Reasoning from analogy — which we have a right to do in this case, since the laws are identical — we must suppose that progressive, intellectual development is as much a law of mind in the future life as it is in this. If the soul survives the death of the body it follows that it will exercise whatever powers it may possess.

The only question, then, is, whether the soul is invested with the intellectual powers requisite for progressive development. This question has already been answered in the discussions of the intuitive powers of the soul — the power of immediate apprehension of law, antecedent to and independent of reason, experience, or instruction. Endowed with such a power, progressive development is a necessary law of its being.

Moreover, unlike the popular conception of heavenly joys, they will be rational, continuous without monotony, and commensurate with the dignity of manhood and the God-like attributes and powers of the human soul. On the other hand, the Christian's conception of a continuous worship and adoration of the Father will be more than justified; for nothing is so well calculated to inspire such feelings as the discovery of his laws, and the consequent realization of the divine harmonies of the universe.

I submit that this is all that man needs to know regarding the conditions of the future life. It will not satisfy the morbid curiosity of those who insist on knowing the unknowable, fathoming the unfathomable, or scrutinizing the inscrutable. They must be referred to those whose perfervid imaginations are capable of "bodying forth the forms of things unknown and giving to airy nothing a local habitation and a name." But that quality of mind is not useful in an inductive investigation of the problems of science. Facts are the only sources of just conclusions. They may be few in number, as in this case; but one clearly authenticated fact is worth more to science than all the speculative philosophy of the universe.

III

MAN'S PSYCHIC POWERS

COMMON SENSE teaches us, and all human experience demonstrates, that it is a waste of time and energy to argue a question in controversy, or to present proofs on either side, before the vital issue has been clearly defined, and that this can be done only by a logical process of exclusion, or elimination, of all irrelevant side issues. Students of English common law jurisprudence understand this process better than any other class of controversialists, for, in the evolution of the system of practice in common law courts, the process has been reduced to a science. The "pleadings" in a case at law are nothing more nor less than the steps taken in the logical process of eliminating extraneous or irrelevant matter, for the purpose of clearly defining the issue between the parties litigant, and thus determining the nature of the evidence admissible on either side. Thus, A sues B for trespassing upon the property of A by passing over it in going to and from the house of B. The latter may answer the complaint of A by admitting the act complained of, but pleading that he has a right of way over the property granted by A in a deed for that purpose. To this A may answer that he admits that B has a certain paper purporting to be a deed for a right of way over the land,

but may allege that said paper was drawn and signed by a third party, as his agent, when, in fact, the latter had no authority to act as such agent in matters affecting real estate titles. B may then admit that the deed in question was made by C as agent for A, but allege that C was in possession of full authority to act for A in matters affecting the title to real estate. The latter allegation directly traverses that of A, who avers that C had no authority sufficient to bind his principal in real estate transactions; and thus the issue is joined. The merits of the case centre in the question of C's authority to bind his principal, and this may be a purely legal question which the judge can decide.

This is a crude but simple illustration of the logical methods by which courts of common law eliminate, step by step, all irrelevant side issues, and bring the parties litigant at once to a discussion of the real and only vital questions involved. Thus, in the case supposed, neither proofs nor argument were required at any step in the proceedings until the vital issue was developed by the process of exclusion; and what seemed at first to be a plain case of one man flagrantly violating the rights of another turns out to be a question as to the validity in law of the acts of a third party.

Unfortunately, polemist, that is to say, those of them who have the public mind and conscience in their especial keeping in matters of religious and philosophical controversy, cannot be compelled to be logical, or to define an issue, or to confine themselves to its discussion when it is defined. If they could, about ninety-nine per cent of all that has been written on the various subjects of popular controversy would never have seen the light. This is true of many subjects of public dis-

putation, but it is especially true of spiritism, and it is as true of one side as of the other of that question.

Thus many years of time and oceans of ink have been wasted in the discussion of the physical phenomena of spiritism, such as table-tipping, levitation, slate-writing, *et cetera*, each side taking it for granted that the whole question of spiritism could be settled forever by proving, on the one hand, or disproving on the other, the supernormal character of the phenomena. During nearly half a century the evidence for spiritism was practically confined to that class of phenomena. If a table was levitated without physical contact or mechanical appliances, spiritists proclaimed and believed it to be demonstrative proof that spirits of the dead communicate with the living. Nor was this estimate of evidential values confined to the rank and file of spiritists. Learned professors, doctors, and even lawyers, were carried off their logical feet by seeing tables lifted into the air and chairs carried about the room by invisible hands.

Thus the late Dr. Hare of Philadelphia, emeritus professor of chemistry in the University of Pennsylvania, fell an easy victim to that species of logic in the early days of spiritism. Commencing his investigations as a skeptic, he constructed several ingenious machines by which he was able to demonstrate the existence of a force in man capable of moving ponderable bodies without physical contact (telekinesis), and then he immediately rushed into print with a book entitled *Spiritualism Scientifically Demonstrated*. That Professor Hare should fall into such an error may be accounted for by the fact that in his day no other than the spiritistic hypothesis had been seriously advanced to account for the facts. Besides, scientists in those days

generally contented themselves by simply denying the existence of the phenomena and refusing to investigate, which was a tacit admission that if the phenomena were true the spiritistic explanation followed. The result was that those who did investigate and verified the phenomena naturally felt justified in accepting the only explanation offered. It followed as a natural consequence that the great body of spiritists believed, and they still believe, that the claims of spiritism are demonstrated to be true by the phenomena of telekinesis.

Nor is it at all strange that the rank and file should so believe since they have such modern examples as are found in the attitude of such scientists as Alfred Russell Wallace and Sir William Crookes. Each of these eminent savants verified the physical phenomena of spiritism, especially telekinesis, by indubitable tests, and each ended by declaring himself a convert to spiritism. No one can doubt the ability of either of these gentlemen to make correct observations of facts when conducting a scientific investigation, for they were both trained in the strictest schools of scientific inquiry. So, when they tell us that they have verified the fact that ponderable bodies can be moved without physical contact, and describe and illustrate the process of verification, we are bound to believe them. But when they assume to draw conclusions from those facts, their reputation for habits of close scientific observation of mere phenomena no longer commands confidence; for it is one thing to be a close observer of facts and quite a different thing to be able to draw a correct conclusion from those facts. In other words, it does not necessarily follow that a scientist is also a logician. In point of fact it often happens that the closest and most minute

observers of facts are the least competent to formulate from them a correct generalization, or to estimate their evidential value. A striking example is found in Sir William Crookes in his treatment of psychic phenomena in general, and telekinesis in particular, and the example becomes still more striking when his conclusions are contrasted with those of his collaborators, Serjeant Edward W. Cox and Dr. Huggins, F. R. S., in whose presence the tests were made.

Professor Crookes, the scientist, eminent as the discoverer of a new metal, and as having rendered possible the discovery of the Roentgen rays, devised the instruments of precision by which telekinesis was demonstrated, made the experiments and became a spiritualist. Serjeant Cox, an eminent lawyer, skilled in logic, practised in the art of testing truth, detecting falsehood, and estimating evidential values, observed the same facts, and found that they excluded spiritism as a factor in the case. They both agreed, however, that their experiments demonstrated the existence in man of a hitherto unrecognized force, which they agreed in designating as "psychic force" — "a force emanating from, or in some manner directly dependent on, the human organization." In this they both agreed, although they ultimately disagreed as to whether the cooperation of the spirits of the dead was necessary to set the force in motion. Serjeant Cox mentioned eighteen characteristics of the phenomena as developed in the experiments made in his presence, each of which was wholly inconsistent with the spiritistic theory. Professor Crookes, on the other hand, ultimately concluded that the spiritistic theory was the only tenable one. I do not say that this particular series of experiments con-

verted him to spiritism, but I do say that in all his public utterances on the subject there is not the slightest evidence to show that his conversion was brought about by the observation of any other than the purely physical phenomena of spiritism. And it is against the acceptance of this character and quality of evidence for spiritism that I protest in the name of outraged science, logic, and reason. Why?

1. Because the existence of a "psychic force," inherent in the human organism, a force capable of levitating heavy tables or other ponderable bodies without physical contact, is amply sufficient to account for all the purely physical phenomena of spiritism. Obviously a physical force that is great enough to lift a table is great enough to produce any of the minor physical phenomena, such as slate-writing, *et cetera*. In either case the force is guided by intelligence — presumably that of the medium — until the contrary is shown by competent evidence.

2. There is nothing in the purely physical phenomena of spiritism that proves or disproves the spiritistic hypothesis. The proof of the existence of psychic force, however, does, as Serjeant Cox justly remarks, "shake to its foundation the materialism of modern science by the probability it raises that, as a fact in nature, there is in us an entity, distinct from the corporeal structure, which can exercise an active force, directed by intelligence, beyond the limits of the bodily powers." He might have added that it also raises the presumption that this intelligent entity survives the dissolution of the body, and that, therefore, spirits do exist beyond the grave. This much, in all candor, must be conceded to spiritism. But it is one thing to create a presumption

in favor of a life after death, and quite another to prove that spirits of the dead communicate messages to the living through mediums.

And this is the crucial question raised by spiritism: Do spirits of the dead communicate with the living through mediums?

This is the issue, and the only question which we are called upon to consider, and no phenomenon which does not throw light upon this question can be accepted as possessing any evidential value whatever. All the physical phenomena, such as table-tipping, slate-writing, *et cetera*, must therefore be thrown out of court, for the following reasons:

1. The only evidence which can possibly prove the affirmative of the issue is that which will demonstrate the personal identity of the alleged communicating spirit.

2. The only possible way that personal identity can be established by an alleged spirit is by the communication of personal intelligence.

3. It is therefore the character and contents of the messages received from alleged spirits that must determine their genuineness.

4. Obviously, the levitation of tables affords no assistance in the analysis of the content of a message.

Nor can any other physical phenomenon throw the faintest possible light upon the question of personal identity, and, pending the settlement of that question by other forms of evidence, physical phenomena are logically valueless to spiritism from an evidential point of view. They prove nothing but the existence of a psychic force inherent in the vital organism of the living man. It is true that messages, purporting to

come from spirits of the dead, are delivered by means of physical manifestations. But their evidential value rests entirely with their contents, and not in the methods employed in their delivery.

It follows that we may safely admit all that the most ardent spiritist claims in regard to the purely physical phenomena; for it may be all genuine, or it may be all fraudulent, without in the least affecting the crucial question: Do spirits of the dead communicate with the living through mediums?

It will thus be seen that one of the supposed evidential strongholds of spiritism vanishes the moment the logical rule excluding side issues of no evidential importance is applied.

The fact remains that there are many phenomena bearing directly upon the question of personal identity, which, unexplained, possess great evidential value in favor of spiritism. Moreover, it must be said in behalf of the great body of spiritists, that the valid explanations of the phenomena which converted them are the result of scientific discoveries of a comparatively recent date.

Thus one of the strongest proofs urged by them of personal identity was the fact that mediums of unimpeachable character thoroughly believed in the genuineness of their own trance utterances when they declared themselves to be under the control of certain spirits. And when to this confidence in the integrity of the medium was added the fact that he often personated the alleged spirit with marvellous fidelity to the known character of the spirit, the evidence of personal identity was deemed complete. Voice, gestures, bearing, and personal idiosyncrasies were, in fact, often so perfectly reproduced as to leave no doubt in the minds of wit-

nesses of the identity of the alleged spirit. Moreover, this was frequently done by mediums who had never been suspected of possessing any histrionic ability whatever in their normal condition.

But when hypnotism came to be studied as a science, and the law of suggestion was discovered, it at once became evident that this marvellous dramatic play of personality possessed no evidential value whatever as tending to prove the identity of an alleged spirit. And this conviction became a certainty when the law of mental duality was formulated. The points bearing upon the case may be briefly stated as follows:

1. The so-called spirit medium, in the trance condition, is simply self-hypnotized, and is consequently subject to all the conditions and governed by all the laws pertaining to hypnotism. That is to say, the objective, or reasoning mind, is in abeyance and the subjective mind is in control.

2. The subjective mind is constantly amenable to control by suggestion. That is to say, it accepts as true every suggestion or statement that is made to it, and it carries every suggestion, true or false, to its legitimate conclusion.

Thus, if the suggestion is made to a hypnotized subject that he is a dog, he will act the part suggested just as perfectly as it is physically possible, firmly believing for the time being that he is a dog. The same is true of every possible suggested change of personality. Everybody knows how perfectly a hypnotized subject will personate any suggested character, high or low, good, bad, or indifferent. Nor can any one fail to correlate the phenomena with those of spiritism when a spirit is suggested as being in possession of the medium. The

psychological conditions are identical; and if the subjective mind of the medium did not respond to the suggestion and act accordingly it would argue an exception to a universal law of nature.

But, it has been objected, the medium is not always in the trance or hypnotic state. On the contrary, he is as often perfectly conscious when he is performing his best work. Granted. But so much the stronger is the case for suggestion, for, from his standpoint, so much the firmer are his grounds for belief. A medium is usually one who, from his youth up, has been reared in an atmosphere of spiritism. His whole mental environment, therefore, constitutes a perpetual suggestion favorable to spiritism. He trains himself for mediumship because he believes, and he confidently expects that spirits of the dead will take possession of his organism and do things. In due time his hopes are realized. He becomes conscious of an influence at work within his organism which manifests intelligence and powers of which he is not the conscious possessor. He knows nothing of the new psychology, and is most likely unaware that there ever was an old one. He knows nothing of the dual mind, and probably has every reason to doubt whether he has even one mind — of his own. In short, from his intellectual view-point, he has every reason to believe that the intelligence and power thus strangely manifested is extraneous to himself. This, of course, constitutes the strongest possible suggestion to his subjective mind that it is a foreign intelligence, and that the suggestion should be accepted and dramatically carried to its legitimate conclusion is in strict accordance with what we should have a right to expect from what science has learned of the law of suggestion

through experimental hypnotism. In fact, the spiritistic suggestion is infinitely stronger and more likely to be fully accepted and promptly executed than the other, for the obvious reason that the medium believes, both objectively and subjectively, in the truth of the suggestion, whereas the hypnotized subject objectively knows that the experimental suggestions are false to the point of absurdity. Nevertheless, so potent is the influence of suggestion over the subjective mind, in either case, that it is compelled by the fundamental law of its being to believe whatever suggestion is imparted to it, and to dramatically carry it to its legitimate conclusion by acts and words corresponding to the central thought embraced in the suggestion.

It is evident, therefore, that personal identity cannot be predicated upon either the personal honesty or the convictions of the medium, or upon his dramatic personation of the suggested personality. And thus does another supposed evidential stronghold of spiritism utterly vanish in presence of the demonstrated facts of modern science.

We may, therefore, admit all that the most pronounced spiritist may choose to claim in favor of the honesty of mediums, or in regard to their wonderful ability to personate particular spirits, since neither fact possesses the slightest evidential value in view of the well-known facts of experimental hypnotism.

It now remains to consider those phenomena of so-called spiritism which have a possible evidential value, namely, the alleged messages from the spirits of the dead. Before proceeding with the discussion I wish to remind the logical reader again, first, that no evidence can be of any possible value except that which proves,

or tends to prove, the personal identity of the alleged communicator from the other world; and, secondly, that the only possible means by which personal identity can be proved is by the communication of personal intelligence.

It should also be remarked at the outset that the personal intelligence communicated must be such as to exclude any rational doubt as to its source. That is to say, the evidence for personal identity of an alleged communicating spirit should be so clear and conclusive as to exclude any possible explanation based on mundane causes known to exist. It must not be forgotten for a moment that the contest between spiritism and its opponents is a contest between supermundane and mundane theories of causation, with all the presumptions, logical and scientific, against the supermundane. Nor must the logical axiom be lost sight of which forbids us to refer any phenomenon to a supermundane cause so long as it is explicable under known natural or mundane causes. Another axiom of science of equal pertinence is that we must never explain the unknown by that which is still more unknown.

If the reader will bear in mind these time-honored axioms or rules of scientific investigation he will find no difficulty in arriving at the conclusion that there is no valid evidence whatever in so-called spiritistic phenomena that spirits of the dead communicate with the living through mediums.

As before remarked, this is the main issue to be decided: Do spirits of the dead communicate with the living through mediums? The subsidiary issues pertain to the validity of the evidence now offered in proof of the personal identity of the alleged communicating

spirits; and no scientific polemist on either side now pretends to discuss any other question, for the simple reason that the whole question of spirit communion now hinges upon the validity of that evidence. And it is freely admitted that if the alleged communications are to be taken at their face value, the question has been settled over and over again in favor of the spiritistic hypothesis. The admitted facts in the case may be briefly stated as follows:

Certain highly endowed psychics, or so-called "mediums," such as Mrs. Piper of Boston and many others, have repeatedly demonstrated the fact that when in the subjective or trance condition in a spiritistic circle they evince a knowledge of the sitters' affairs that they could not possibly have obtained by any normal means. This knowledge, of course, came to light in the guise of communications from spirits of the dead, and it often extended to the affairs of the alleged communicators as well as to those of their living friends in the circle. So minute and complete and circumstantial was this knowledge that it often left no room for doubt in the minds of sitters of the personal identity of the alleged spirit.

But when the Society for Psychical Research demonstrated the fact that thought-transference, or telepathy, is a power of the human mind, and that it was most easily developed in persons in the subjective state, it at once became evident that telepathy afforded a complete explanation of much that was before mysterious and inexplicable. The result has been to narrow the issue between spiritists and their opponents so that now but two theories are the subjects of controversy, namely, the spiritistic and the telepathic. And it is now admitted

by all who pretend to discuss the subject from a scientific point of view that the possession of supernormally acquired knowledge by a spirit medium possesses no evidential value for spiritism where telepathy cannot be eliminated as a possible factor.

In order, however, to give the reader a clear idea of the present status of the question it will be expedient to continue to treat the subject historically, to the end that I may present a continuous series of steps showing how a gradually increasing knowledge of nature's laws and forces has, step by step, relegated the evidential strongholds of spiritism to a state of harmless disuse.

Telepathy, as a possible factor in spiritistic phenomena, was urged many years before the Society for Psychological Research had an existence. The old mesmerists had demonstrated it as a power of the human mind long before the "Rochester knockings" disturbed the serenity of the Fox family. Modern spiritism was, in fact, the psychological substitute of mesmerism, as I have pointed out elsewhere (see *The Era* magazine for February, 1902), and it could never have obtained the foothold it has but for the mediumistic material found in the thousands of psychics already developed by mesmerism. And when it is remembered that nine out of ten of mesmeric psychics were trained telepathists, it will be seen that spiritism fell on fruitful soil. Naturally its opponents were instant in correlating the two classes of phenomena, and in insisting that telepathy must be held to afford a valid explanation of all that was in the mind of the sitter, or of any one present at the séance. Fair-minded men on all sides of the question agreed that this proposition was necessarily true; and thus the first step was taken in the direction of

affording a scientific explanation of the supernormally acquired knowledge admittedly in the possession of the medium. A portion, at least, of that knowledge was due to a known natural cause, and the supermundane explanation was, in a corresponding degree, relegated to the background.

But spiritists soon proceeded to show that mediums sometimes told things that (a) the sitter was not thinking of at the time, and (b) things that he might have once known but had entirely forgotten. This was so often demonstrated that the advocates of the telepathic theory were confounded; for they had no answer to the triumphant question of spiritism, How could it be mind reading, when the subject was not in the mind of the sitter, or had been completely forgotten? Needless to say spiritism scored a triumph which lasted many years.

In the meantime, however, the Society for Psychical Research was organized and instituted an exhaustive investigation of telepathy and other kindred phenomena; the dual mind theory was formulated, and a clear line of demarcation was shown to exist between the mind of ordinary waking consciousness, or objective mind, and that intelligence which is ordinarily submerged below the threshold of normal consciousness, or subjective mind. The crucial points demonstrated by the research which interest us in this connection were the following:

1. That telepathy is a power belonging exclusively to the subjective mind.
2. That ordinarily the content of a telepathic message is foreign to the conscious thoughts of the agent or sitter, — except in experimental telepathy.

3. That the memory of the subjective mind is potentially perfect.

4. That *rapport* (relation of harmony) between the agent (the sender) and the percipient (the receiver) is essential to the successful transmission of a telepathic message.

The bearing of these discoveries upon the question at issue will be at once apparent to the intelligent reader. It will be seen, first, that the fact that a sitter is not consciously thinking of a given subject when in presence of a psychic does not prevent a telepathic transmission of the subject matter, since telepathy is exclusively between subjective minds.

Secondly, that the fact that a sitter has objectively forgotten a circumstance does not prevent a telepathic transmission of the fact, since the memory of the subjective mind is potentially perfect.

Thus does another evidential stronghold of spiritism vanish in the light of modern science, for it is now self-evident that what a sitter is consciously thinking of, or what he has once known, but has objectively forgotten, weighs not one hair against the telepathic theory. On the contrary, it so completely sustains the telepathic theory that the burden of proof rests upon spiritism to show, by demonstrative evidence, that all cases where supernormally acquired knowledge is in evidence may not be thus explained.

This they are attempting to do, but by a process as flagrantly illogical and unscientific as that employed in any of their attempts to sustain a constantly failing cause.

Numerous cases are now in evidence where mediums have evinced a knowledge of facts, say in the earthly

career of an alleged communicating spirit, which no one present could by any possibility have ever objectively known.

This, it must be acknowledged, is the crucial test. It is the last ditch of spiritism, and if such cases can be explained by reference to telepathy their cause is forever lost, for if this fails them there will be left not a shred of valid evidence that spirits of the dead communicate with the living through mediums.

The case, however, is a very simple one and easily disposed of when treated in a straightforward, common-sense manner. It presents but one question about which there can be any possible room for a rational difference of opinion, and that is simple to the last degree to any one who is acquainted with the fundamental facts of telepathy and the elemental principles of logical reasoning. The question is:

Can information telepathically received by one person be telepathically communicated by him to another?

Strange as it may seem to the average reader, the whole question of spirit communion with the living through mediums hinges upon the decision of that simple problem. And this is what I meant in my opening remarks by urging the propriety—the logical necessity—of reducing the question to its lowest terms by eliminating all irrelevant side issues and confining our attention to the vital issue when it is found.

A few words will show the practical pertinency of the question as stated, and this can best be done by supposing a simple illustrative example:

A séance is held in which the sitter is supposed to be

put into communication with the spirit of his deceased father. To make the case clear and free from complications, we will suppose that all the rest of the sitter's family and friends are dead, — all died before the death of the father. Then suppose a communication from the alleged spirit to reveal the fact that some time before his decease the father had concealed a large sum of money in a certain locality, naming it; that it was intended for the son when he became of age, but that the father died suddenly without having an opportunity to reveal the facts to the son, who, in the meantime, never had a suspicion that his father ever had any surplus cash.

Spiritists hold, of course, that such a case is clearly one in which telepathy cannot possibly be held to afford an explanation, — a clear case, therefore, of spirit communion. Advocates of the telepathic theory, on the other hand, hold that it is just as clearly a case in which telepathy affords an easy explanation, on the obvious theory that information received telepathically by one person can be communicated by him telepathically to a third person. Thus, the father and son must be presumed to have been in telepathic *rapport* during the life of both, and the father must be presumed to have communicated the information to the son, unconsciously, of course, to the latter, since telepathy is a faculty belonging exclusively to the subjective mind. The information was, therefore, lodged in the subjective mind of the son, where it remained, latent, until he came in contact with a psychic who was able to reach the information telepathically and thus elevate the information above the threshold of normal consciousness. The ability to do that is what constitutes a psychic, and a good psychic

can reach the content of the subjective mind of another, presumably without reference to how it got there. The son, not being a psychic, was unaware of the facts which had been communicated telepathically during the lifetime of his father. But the information was there; it was a part of his subjective mental equipment, and only awaited contact with a psychic who could reach it telepathically and thus make it known to the objective consciousness of all concerned.

Is there anything inherently impossible or improbable in this hypothesis? I think not. In the first place, all the logical and scientific presumptions favor it, as against supermundane theories of causation. Telepathy is a *vera causa*; spiritism is not. We know something of telepathy and its conditions, powers, and limitations; we know that it is a means of communicating intelligence between living persons. But we know absolutely nothing of the conditions, powers, or limitations of disembodied spirits. Besides, having shown that telepathy affords a complete explanation of the great bulk of the cases where supernormally acquired knowledge is in evidence, the presumption that all cases may be so accounted for amounts to a logical certainty. Especially is this true in the absence of any reasons to the contrary, and none have ever been given that were not obviously intended to evade the issue rather than to meet it. (See Society for Psychical Research reports in Piper case.) Moreover, if the telepathic theory in this class of cases harmonizes with all that is known of the powers and limitations of telepathy, its truth must be considered as practically demonstrated. And that this is true I shall now briefly attempt to show.

In the first place, the Society for Psychical Research

(before the date of its conversion into an international spiritistic propaganda) published two large volumes (*Phantasms of the Living*) devoted to a record of its telepathic investigations, in which the following facts, pertinent to the inquiry, were developed:

1. That acquaintances, friends, and near relatives are actually or potentially *en rapport* at all times.
2. That the power to project a telepathic impression seems to increase on the near approach of death.
3. That dying persons make an effort to acquaint their near relatives or friends with their condition and wishes, especially when some unsatisfied desire is weighing upon their minds.
4. That the power to convey and to receive thoughts by means of telepathy seems to be practically unlimited.
5. The limitations of telepathy as a means of communication between those who are *en rapport* seem to pertain solely to the power to elevate the communications above the threshold of normal consciousness.

It will now be seen that the powers and limitations of telepathy, as ascertained by years of observation and laborious research, correspond exactly with what we would have a right to expect if the telepathic theory is the correct interpretation of the phenomena under consideration.

Thus, we find an unlimited capacity in the subjective mind to transmit and to receive information by telepathy, which, with the perfect memory of the subjective mind, argues a vast store of information thus acquired from friends and relatives with whom one is *en rapport*.

The limitations, which pertain solely to the means of drawing upon this fund of information, are explained

by the fact that the only available process by which this can be accomplished is the employment of psychics (mediums), and these are constantly handicapped by the abnormal conditions necessary for the work of mediumship, as well as by the limitations involved in the fact that they are constantly open to control by the power of suggestion while in that condition.

And when to these powers and limitations is added the constant *rapport* of relatives and friends, the supreme efforts of the dying to acquaint their friends with facts of mutual interest and importance, and the latency of the knowledge thus acquired (lodged in the subjective mind) when the percipient is not himself a psychic, it will be seen that there is every possible facility for the phenomena to occur exactly as we have supposed them to occur.

Moreover, there is absolutely nothing in any recorded experience in telepathy to militate against that theory in this class of cases, for it is manifest that if the supposed case can be explained by reference to telepathy every other possible case can be thus accounted for. That is to say, if telepathically acquired information can be telepathically transmitted to a third person it would be impossible to imagine a case that the fact would not account for.

I repeat, therefore, that this is the crucial question upon which spiritism hinges; and it is, of course, important that it should be determined whether *télépathie à trois*, as the French term it, or telepathy by three, in plain English, is a telepathic potential. Let us put the question in another form, — a form that will show the affirmative to be self-evident:

If A can communicate intelligence to B by any known

means of transmitting human knowledge, B can communicate the same intelligence by the same means to C, conditions, of course, being equal.

This might be termed a "universal postulate," according to Herbert Spencer's definition of that term, for "its opposite is inconceivable." If it is true of one means of communicating human intelligence it is necessarily true of all. If it is true of all, then it is self-evident that "telepathy by three" is a telepathic potential. And if that is true it follows that all conceivable cases of supernormally acquired intelligence by so-called mediums, are easily explicable under the telepathic hypothesis.

What answer has spiritism to offer to these propositions? When I first propounded the theory in substantially this form, eleven years ago (see *The Law of Psychic Phenomena*), it was met by a Podsnappian wave of the hand, and—"Oh! that is carrying telepathy too far." But neither then nor since has any one attempted to say why telepathically acquired information cannot be telepathically transmitted to a third person. Why? Is it because the proposition is unanswerable; and because, if true, it is fatal to spiritism? The reader must judge.

Later the attempt is being made by pseudo-scientists of spiritism to ignore the real issue, and to exaggerate and misrepresent the telepathic theory for the purpose of denying it without the necessity of giving valid reasons for so doing. Thus, they tell us that the telepathic theory presupposes the psychic to be "omniscient," an assertion that for gratuitous absurdity could only be paralleled by the assertion that it required common intellectual integrity to enable them to formulate it.

Strange as it may appear, the answer that comes nearest to being valid, if not scientific, comes from the corner-grocery savants of spiritism. They tell us, "straight from the shoulder," as it were, that "there is no such thing as telepathy; it's all spirits."

Obviously, argument would be futile against such robust faith in the supernatural, and I pass on to an equally absurd proposition that is current among the "scientists" of spiritism. Beginning with Alfred Russell Wallace, and continued with insistent iteration by the Society for Psychical Research spiritists, we are told that the spiritistic theory bears internal evidence of scientific truth because of its "simplicity."

It must be admitted that it is far "simpler" to refer all psychic phenomena to spirits than it is to explain them on scientific principles. Besides, it obviates all necessity for thinking, and that is a great point gained for many otherwise remarkably good people. The theory that the earth is flat was also very simple, and it would have saved a vast deal of robust thinking if the world's astronomical geniuses had been content to recognize "simplicity" as a valid scientific postulate. The savage's theory that "thunder is the voice of an angry god" is simple to the last degree — much simpler than is the vast science which has grown out of the scientific observation of the electrical phenomena of the heavens.

If simplicity is the measure of scientific accuracy, there is a theory extant that is far less complicated than that which postulates millions of good, bad, and indifferent spirits at work, often at cross-purposes — some even with intent to deceive mankind into scientific beliefs, and others repudiating all that science thinks it

knows; no two spirits, in short, ever agreeing upon any one proposition. If, as I said, simplicity is the measure of scientific verity, why not adopt the far more simple, and vastly more orthodox, theory that the devil is responsible for the whole business? Aside from the superior quality of "simplicity" inherent in the satanic theory, the results of spiritism invest it with an air of plausibility not to be ignored as valueless by spiritistic logicians.

In concluding this I desire to answer a question that has often been propounded by spiritists concerning the telepathic theory and which will doubtless occur to many of the readers of this article. It is this:

"You admit," say the spiritists, "that two embodied spirits can communicate with each other by means of telepathy. Why, then, cannot a disembodied spirit communicate with an embodied spirit by the same means?"

This is a very popular question, and it is usually held to be a "poser," especially by those whose logic is a little infirm. The obvious answer is that it is not a question pertinent to the issue involved in spiritism. As for myself, I do not know why they cannot—I do not even know that they cannot—so communicate. But that is not the question raised by the phenomena of spiritism. That question is: "Do spirits of the dead communicate with the living through mediums?" obviously a very much more restricted question, as it involves solely the question of mediumship, otherwise the phenomena of spiritism. And it is exclusively from the evidence afforded by the phenomena themselves that the question must be settled.

I have endeavored to show that the whole question

hinges upon "telepathy by three," and that that is a self-evident proposition. Besides, it can easily be shown that telepathy by three is, in fact, a very common phenomenon. It follows that spiritism, considered as a subject of scientific inquiry, has no polemical weapon now available except the insensate denial of a self-evident proposition.

It will now be in order to take our logical bearings by a brief recapitulation of the points thus far established, with a view to ascertaining what positions, if any, may be further fortified by the facts of human experience. It is safe to assume that the following propositions will not be disputed by any scientist who cares to apply the elementary principles of logical induction to the investigation of spiritism.

1. That the issue is, "Do spirits of the dead communicate with living persons through mediums?"

2. That the only valid evidence competent to prove the affirmative must be such as will demonstrate the personal identity of the alleged communicating spirit.

3. That physical phenomena, *per se*, therefore, possess no evidential value whatever.

4. That, in the absence of other proofs of personal identity, the dramatic personation of a spirit possesses no evidential value.

5. That telepathy, or thought-transference, is a valid explanation of all cases where the information "communicated" was in the possession of any person present at the séance.

6. That the telepathic explanation is none the less valid because the information was not consciously possessed by the sitter, as when he had quite forgotten the facts "communicated."

Thus far, no intelligent spiritist will take exception. This narrows the field of inquiry to those communications which contain information not obtained by the medium, or any one present, by any of the normal, sensory channels of communicating human thought. That is to say, the information, if possessed by the sitter, must have been received telepathically, unconsciously to himself and to the agent from whom it was obtained. This involves the question whether information telepathically received can be telepathically communicated to a third person. And this, as I have already shown, is the ultimate issue to be decided; for if *télépathie à trois*, or "telepathy by three," is a telepathic potential, it is manifestly impossible to imagine a case to which the principle would not afford a complete explanation. I have also shown that telepathy by three is a self-evident proposition. That is to say, it is self-evident that if A can send a message to B, by any known means of communicating intelligence, B can communicate the same message, by the same means, to C, conditions being equal.

Is telepathy an exception to this universal rule? Is knowledge communicated telepathically anything less than knowledge? Is information thus communicated to the subjective mind not a part of its mental equipment? Is the subjective mind prone to forget what it has once known? These questions answer themselves. All who are even superficially acquainted with the salient characteristics of the subjective mind know that it never sleeps, and never forgets; that knowledge, however trivial may be its character, may remain latent for many years, but that proper mental conditions will bring it forth with all its details. The old psychologists were

well aware of this fact. If any one has ever given a reason why telepathically acquired knowledge rests upon a different footing in this respect from knowledge acquired in any other way, I have yet to hear of it.

Now what are the facts? I have said that telepathy by three is a self-evident proposition, and it is. But as spiritists require demonstrative proofs of self-evident propositions that contravene their cherished beliefs, I shall cite a few cases, taken mostly from the proceedings of the Society for Psychical Research, which prove our thesis beyond peradventure.

Telepathy by three is, in point of fact, a very common phenomenon. But, like many other familiar facts in nature, it has remained for years unnoted by scientific investigators because its importance was not realized. Who could have predicted, seventeen years ago, that the whole question of spirit intercourse through mediums would ever hinge upon the truth or falsity of the familiar phenomenon of telepathy by three? Certainly not the spiritistic members of the Society for Psychical Research, for their early reports abound in well authenticated cases. It is significant, however, that, since the conversion of that society into a gigantic spiritistic propaganda, the reported cases of telepathy by three, outside of alleged spiritistic communications, are conspicuous for their scarcity. Fortunately, however, for the cause of truth, that society cannot obliterate its own record; nor can it prevent the daily exemplification of that phenomenon in experimental telepathy, nor suppress the reports of thousands of spontaneous cases constantly occurring outside the limited field to which it now confines its earnest efforts.

F. W. H. Myers, for instance, early admitted the possibility of telepathy by three in cases of collective phantasms. (See p. 320, Vol. VII. Proc. S. P. R.) But at the time he preferred another theory, which has since been shown to be fallacious, thus leaving telepathy by three as the only possible solution, outside of the assumption of the objective reality of the phantasm.

In the same volume, p. 295, Mr. Walter Leaf, one of the ablest of the then active members of the Society for Psychical Research, clearly formulated the doctrine. Reviewing a current publication by von Hartman, Mr. Leaf offered the following pregnant suggestion:

“And finally, von Hartman seems to have overlooked the consequences which result from the joint admission of the reality of telepathy and the infinite retentiveness of the subliminal memory. It can hardly be doubted that those rare telepathic impressions which rise to the level of consciousness are but a fraction of those which the under-self is continually receiving. Yet each one of these must be stored up in the unconscious memory, and be capable of reproduction under favorable circumstances. If we further admit that the unconscious self is capable of handing on such impressions, whether by telepathy or thought-transference, they remove all necessity for the assumption of spiritual agency or clairvoyance, when we have to deal with a piece of knowledge which may at any time have been in the mind of any living man.”

Professor Oliver Lodge, who is now the president of the Society for Psychical Research, very early announced his belief in “thought-transference” as fully competent to explain all that is mysterious in so-called spirit communications, on the ground that it is a “known cause,” that is, one to which there need be no hesitation in appealing in order to explain facts which without it would be inexplicable. (Proc. S. P. R. Vol. VI. p.

451.) Professor Lodge did not distinctly formulate the doctrine of telepathy by three, but he cited two cases, in contrast, which are demonstrative of the principle. In one of them a deceased uncle figured as the communicator, and he related many facts — family affairs — of which those present knew nothing, all of which, however, “have been more or less completely verified,” says the professor (pp. 458-9). On the other hand, a message was received in his presence from a comparative stranger—not a relative of any one present—and everything which the sitters knew about was correctly related; whereas, the statements made of which they knew nothing were all false (p. 461).

Obviously the principle of telepathy by three affords a full and complete explanation of the knowledge obtained from the uncle, and the failure in the other case is just as obviously due to the absence of the necessary conditions, namely, *rapport* between the sitters and the communicator during the lifetime of the latter. The spiritistic hypothesis necessarily fails, for the conditions from that standpoint were precisely the same in the two cases. The principal sitter was the same, namely, Professor Lodge, the medium was the same, Mrs. Piper, and the so-called “control” was in each case none other than the now noted Dr. Phinuet, a Frenchman, who had forgotten *la langue française*. If, therefore, it was a spirit in one case it was a spirit in the other, and no good reason has yet been given why one spirit should tell the truth, whether the sitter knows the facts or not, while another tells it only when the sitter knows the facts. In other words, the spiritistic hypothesis does not furnish an explanation of the difference in the results of the two cases. On the other hand, telepathy

by three does account for it in the only way consistent with the known facts of modern science.

Andrew Lang is another famous psychical researcher who finds telepathy by three to be the only tenable hypothesis explanatory of the phenomena under consideration. He has caused numerous experiments to be made by means of "crystal gazing," through the agency of Miss Angus and others, many of which are demonstrative of telepathy by three. A few of the latter he sums up as follows: (See Part XXXVI. Proc. S. P. R. pp. 48-50.)

"Again and again Miss Angus, sitting with man or woman, described acquaintances of theirs, but not of hers, in situations not known to the sitters, but proved to be true to fact. Now, the far-going hypothesis of direct clairvoyance was here excluded (in most cases, not in all) by conditions of time. In one instance, Miss Angus described doings from three weeks to a fortnight old, of people in India, people whom she had never seen or heard of, but who were known to her 'sitter.' Her account, given on a Saturday, was corroborated by a letter from India, which arrived next day, Sunday. In another case she described (about 10 P. M.) what a lady, not known to her, but the daughter of a matron present (who was not the sitter), had been doing about 4 P. M. on the same day. What the person seen was doing was not a thing familiar, for I asked that question. Again, sitting with the lady, Miss Angus described a singular set of scenes much in the mind, not of her sitter, but of a very unsympathetic stranger, who was reading a book at the other end of the room. I have tried every hypothesis, normal and not so normal, to account for these and analogous performances of Miss Angus. There was, in the Indian and other cases, no physical possibility of collusion; chance coincidence did not seem adequate; ghosts were out of the question, so was direct clairvoyance. That Miss Angus (who, by the way, was in the most normal and wide-awake condition) had got into touch with the Absolute, and was making discriminating selections from the stores of Omniscience, did not seem likely, because her crystal pictures appeared to be directed by the mind of a person present, not always the sitter. Nothing

remained for the speculative theorizer but the idea of cross currents of telepathy [telepathy by three] between Miss Angus, a casual stranger, the sitters and people far away, known to the sitters or the stranger, but unknown to Miss Angus. Unpublished examples of these things went on the same lines. Miss Angus picked up facts, unknown to the sitters, about people known to them, but not to her.

“ Now suppose that Miss Angus, instead of dealing with living people, by way of visions, had dealt by way of voice, or automatic handwriting, and had introduced a dead ‘communicator.’ Then she would have been on a par with Mrs. Piper, yet with no aid from the dead. . . .

“ Not to rely solely on Miss Angus, I take another instance. My friend, Mr. Lesley, is known to the world as a man of business, a golfer, and a composer. He can see crystal pictures, but (like most of my acquaintances who possess the faculty, including my cook) has hardly any interest in the practice. One day Mr. Lesley and I had been talking about a lady, unknown to him, but known to me, though I had never seen her house. Mr. Lesley began to look into a glass water-jug, and described what he saw, the interior of the hall of a house, with a good deal of detail. Neither of us recognized the house. I happened later to tell this to the lady of whom we had been talking; she said, ‘Why, that is my house,’ and, on visiting it, I found that in all respects it answered to Mr. Lesley’s description.”

Mr. Lang then proceeds to say that if the lady had been dead, and the psychic had been in a trance, spiritists would have claimed it as a spirit communication. But as nobody was dead, “the theory of a spirit is wholly impossible, and if not telepathy *à trois*, then some other nonspiritualistic theory must account for the facts, as for the facts in Miss Angus’s cases.”

A typical case once came under my own observation, which not only demonstrates telepathy by three, but reveals its wide range of usefulness to charlatans and mountebanks of many varieties. A gentleman residing in a distant northern city visited Washington on his way to Florida, and, being somewhat interested in

psychical matters, especially telepathy, requested me to introduce him to some one who could satisfy his curiosity by some signal display of telepathic powers. At that time I happened to know a hypnotic subject who occasionally manifested remarkable powers in that direction. He was neither a spiritist nor a professional psychic, and shrank from publicity, but would occasionally display his powers to a select few of his friends. One of his peculiarities consisted in a fondness for mystifying his friends by "dropping into prophecy" concerning their future movements, often with startling results, the case that I am about to relate being in point. With much reluctance he consented to meet a total stranger, having been assured by me that the gentleman was on his way to Florida and would not be here to trouble him further. The séance was accordingly held that evening in the gentleman's private room at the Arlington, two or three friends of the sitter being the only ones present besides the *dramatis personæ*. Having hypnotized the psychic, to insure perfect *rapport* I caused the two to shake hands, saying to the psychic as I did so: "Now I want you to tell this gentleman all that he knows about himself, and more, too, if possible."

After a few moments of silence the psychic asked to take the sitter's hand again. This being complied with, he said, speaking very rapidly:

"I can tell the gentleman one thing that he thinks he knows, but does not know. He thinks that he is going to start for Florida to-morrow morning."

"Yes, I told you that," I replied.

Without noticing the interruption he continued:

"I can tell him another thing that he does not know. He is going directly home to-morrow morning."

"I certainly do not know that," replied the sitter. "If I live I shall start for Florida to-morrow morning."

"Nevertheless, you will go home before you go to Florida. I prophesy that, and don't you forget it," replied the psychic with some show of dogmatism.

"Did the spirits tell you that?" asked the sitter, sarcastically.

"No! I am not a medium, much less a spiritualist," indignantly replied the psychic.

Knowing that he was sensitive on that point, and realizing that he was becoming excited, I signalled the sitter to cease talking on the subject and proposed other experiments. Several crucial tests were made during the evening with special reference to the question of independent clairvoyance, resulting in demonstrative proof that the psychic did not possess that power, but that he did possess telepathic powers to an extraordinary degree. The latter was demonstrated the next morning when the gentleman boarded the first train for home.

His sudden change of front was in response to a telegram received about four o'clock in the morning from his family physician, urging his instant return on account of the sudden and serious illness of his wife.

"Spirits," explains the spiritist. But nobody was dead.

"Clairvoyance!" suggests the belated believer in the existence of that power, — that is, in the power to see what is occurring at a distance, independently of the aid of telepathy from living persons. Aside from the all but demonstrated fact that no such power exists, it was obviously not independent clairvoyance in this case, since personal contact with the sitter was necessary.

“Muscle reading!” oracularly proclaims the pseudo-scientist, who feels bound, by the limited range of the authorized beliefs of his cultus, to find a physical explanation for every phenomenon.

To which I reply that if the potentialities of “muscle reading” extend to the cognizance of the acts and thoughts of strangers hundreds of miles distant; and if that knowledge can be obtained by physical contact with one who is in telepathic *rapport* with the actors, I am content, for the sake of argument, to call it “muscle reading.”

In this case; however, the only possible muscle reading was between the psychic and the sitter. But the fact remains that the psychic, by some means, became cognizant of what was, for the time being, uppermost in the subjective mind of the sitter, namely, the condition and necessities of his own family; and that information must be presumed, in the absence of any other explanation, to have been obtained telepathically from his distressed wife.

No psychical researcher, who is at all acquainted with the propædeutics of psychic science, will for a moment deny the probability of telepathic communion between husband and wife under such circumstances. Indeed, the records of the Society for Psychical Research render this as certain as any fact in science. The information, therefore, that led the psychic to “prophesy” the sitter’s early return home was certainly in the subjective mind of the latter; and that the psychic obtained it directly from the sitter’s subjective mind by some means other than through ordinary, sensory channels — call it telepathy, thought-transference, or muscle reading, or what you will — is not open to rational doubt. Terminology

is not the essence of a scientific inquiry; and the fact remains that this case is typical of that telepathy by three which spiritists, with hysterical insistence, see fit to deny.

I have said that telepathy by three lends itself to the uses of a great variety of charlatans. Thus, the psychic in this case was fond of posing as a prophet, pure and simple, and would rarely give reasons for his previsions. Nevertheless it was always evident that he obtained his data by means of his telepathic powers, and thus mystified his sitters to the top of his bent.

It is obvious that if he had seen fit to pose as a spirit medium he would have won renown as such, and by the same means that others do. All that would have been required in the case mentioned would have been for him to say that the spirits had told him that the sitter's wife was dangerously ill. Moreover, the telepathic visions from which he obtained his data for "prophesying" the sudden departure of the sitter for home would very likely have been practically the same if he had believed them to have been produced by spirits.

In short, a good telepathist is well equipped for successful charlatanry in almost any field; for example, fortune-telling, palmistry, astrology, clairvoyance, etc. In other words, whatever of supernormally acquired knowledge is found to exist in the mind of any psychic, no matter what his particular theory of causation may be, or what may be his particular method of elevating it above the threshold of normal consciousness, telepathy affords a full and complete revelation of its mysterious source. And when the truth is once realized of the self-evident proposition that knowledge telepathi-

cally acquired from one person can be telepathically communicated to another, it will be apparent that every imaginable case of alleged spirit communication through mediums easily ranges itself under the terms of the telepathic hypothesis.

IV

SPIRITISTIC PHENOMENA AS EVIDENCE OF LIFE AFTER DEATH

IN the examination of any question requiring the exercise of the power or faculty of discrimination between what is and what is not good evidence for or against a given proposition it is always best to begin by excluding from the field of inquiry all irrelevant side issues. In no realm of human inquiry is the application of this rule more important, nor is it anywhere more generally disregarded than in estimating the value of spirit phenomena as evidence of life after death.

It is true that a vast congeries of phenomena, of indefinitely varied character, is presented for our consideration, each of which we are invited to believe is produced by a disembodied spirit; and to the superficial observer each is entitled to a separate investigation, or at least to equal consideration as to its evidential value. It is, however, obvious to the scientific investigator that this assumption is not warranted, and that, in point of fact, there must be much of the phenomena that in itself possesses no evidential value whatever.

A moment's consideration will reveal a clear line of demarcation between those phenomena which may pos-

sess evidential value and those which can by no possibility prove or disprove the claim of spiritism. The latter class comprises all of the physical phenomena, such as rapping, table-tipping, levitation of ponderable bodies without physical contact or mechanical appliances, slate-writing, *et hoc genus omne*. It is not, however, necessary either to doubt or deny that these phenomena are produced by supernormal means, except perhaps for the purpose of assuming to be ultra-scientific; nor is it necessary to believe in their genuineness, for they all may be fraudulently produced; or they may all be veridical without affecting the question of spirit intercourse. A few words will make my meaning clear.

Let us take, for example, the phenomenon of levitation of furniture. In itself it is no more wonderful that a table should be lifted without physical contact than that a horseshoe magnet should levitate its armature. There is, however, a vast difference between the two phenomena, in that there is an intelligence connected with the movements of the table. It will answer questions and carry on a conversation with those present; and in answer to a question as to the source of the intelligence, the usual reply is that it is the spirit of some deceased person. And here let me say, in all candor, that, in the absence of the light afforded by recent discoveries in psychology, the animistic theory of causation was the most rational explanation of the phenomena. But of this later on. The point I wish to make now is that it is the intelligence with which we have to deal in searching for an explanation of the phenomena. The physical phenomena of themselves afford no possible clue to their origin; and it is only

by an analysis of the intelligence displayed — that is to say, the “communications” received — that we can find evidence as to their source. We may therefore safely leave out of consideration all purely physical phenomena, at least until we have definitely located the source of the alleged communications. The advantages arising from pursuing this logical “method of exclusion” are these: (1) the issue is vastly simplified; (2) the range of inquiry is confined to essentials; (3) it eliminates from the field of inquiry a vast number of phenomena each of which easily lends itself to fraud and legerdemain, and neither of which, whether genuine or fraudulent, possesses in itself the slightest evidential value.

In pursuing the policy of ignoring irrelevant questions, that of the selection of a proper psychic, or “medium,” is also very much simplified. All that is required is one who has acquired the power of self-hypnotization, or, as it is commonly termed, the power to enter with facility the condition of trance, and while in that state to answer questions and perform the usual mental feats of so-called mediumship. As an example of this method of investigation reference is made to that adopted by the Society for Psychical Research, and to the celebrated Mrs. Piper as a representative of the type of medium required.

The theory of spiritism is that spirits of the dead take possession of mediums of this class and employ their vocal organs and hands, respectively, for speaking and writing directly to those present, the functions of the medium’s brain being in the meantime suspended.

This at once presents the real issue: is it true that spirits of the dead communicate with the living through

so-called spirit mediums? Or, to put it still more fairly and conservatively, is there any valid evidence that spirits do so communicate?

In discussing this question it is first in order to inquire what reasons are given by spiritists for believing that the so-called communications, purporting to emanate from disembodied spirits, are in reality what they are alleged to be. It will then be in order to examine the validity of those reasons, or, in other words, to inquire whether the phenomena cannot be otherwise accounted for. In making the latter inquiry I will strenuously insist upon the recognition of the axiom of science that "we have no logical right to attribute any phenomenon to supermundane agency that can be accounted for on principles of natural law."

In stating the reasons for the spiritist belief I will endeavor to do so with absolute fairness, and to that end I will suppose the most favorable conditions that a spiritist could desire. The "reasons" naturally group themselves under two heads. The first group pertains exclusively to the medium, and the second to the character of the "communications." They will be considered separately and in their order. The first group may be stated as follows:

1. The medium is honest, and is normally incapable of dissimulation.
2. The medium sincerely believes the communications to be what they purport to be.
3. The medium is unconscious of having any part or lot in determining the contents or character of the communications, or of possessing any psychological power or attribute that would render unconscious participation possible.

4. The medium, though normally possessing no dramatic power whatever, often personates the *soi-disant* spirit with wonderful accuracy, often to the extent of imitating the voice, gestures, and even the mental idiosyncrasies of the supposed personality.

5. The alleged spirit often manifests mental and moral characteristics antipodal to those normally possessed by the medium, sometimes strenuously disputing her preconceived opinions, and often displaying an obliquity shocking to her moral sensibilities.

It is obvious that here is a series of statements which, if true and unexplained, go far toward establishing the validity of the claims of spiritism. A very few years ago these statements could be met in but one of three ways, namely, (1) a denial of the facts, (2) a charge of fraud against the medium, or (3) an admission of the tenability of the spiritist hypothesis. To-day it would be foolish to deny the facts, since they can be so easily substantiated; to charge the medium with dishonesty would raise an irrelevant side issue; and, in view of the discoveries of modern science, the spiritist hypothesis is no longer tenable. That is to say, the phenomena can now be accounted for by reference to known psychological laws. We may, therefore, begin by admitting all that is embraced in the foregoing propositions; for we shall have no difficulty in finding a solution for all that is mysterious in the phenomena on principles of natural law with which scientists are now well acquainted—principles which are perfectly consistent with the integrity of all concerned, and which, moreover, obviate all necessity for seeking a solution in the realms of the supermundane.

It seems almost superfluous to say that a perfect solu-

tion of all this phase of spiritistic phenomena is found in the law of suggestion. This law is known to every psychological student, except perhaps a few scientists who are committed to the spiritistic hypothesis. For their benefit I will explain briefly what the law is. It was discovered a few years ago by European scientists in the course of their investigations of the psychological problems of hypnotism. It was found that hypnotic subjects invariably accept, believe, act upon, and carry to its legitimate conclusion every statement, or "suggestion," that is made to them. Thus, if a subject is told that he is blind, he will manifest every symptom of a total lack of visual powers. If told that he is deaf, the unexpected firing of a gun in his presence does not startle him. Apparently he does not hear it. If told that he is an infant, "mewling and puking in the nurse's arms," he will simulate physical helplessness and an infantile mentality. In short, he may be told that he is a dog or a devil, a demon or an angel, and he will carry the suggestion to its legitimate conclusion, so far as it is physically possible, firmly believing the suggestion to be true. What is more to our present purpose, if the suggestion is made that he is some other individual, he will impersonate that individual with wonderful accuracy and dramatic power, the excellence of the performance depending, of course, upon his knowledge of the characteristics of the personage represented. What is still more suggestive of our theme is the fact that any good hypnotic subject will respond to the suggestion that he is possessed by a spirit; and, other things being equal, he will deliver messages from the spirit suggested precisely as a genuine so-called medium would do it.

These phenomena, together with innumerable cognates, each pointing to the one conclusion, led to the discovery of the law of suggestion. At first it was supposed to apply only to persons in a state of lucid somnambulism, whether spontaneous or induced; but it was eventually discovered to be a general law, governing, at all times and under all conditions, that part of man's mental organism which is the active agency in the production of all psychic phenomena. Under the theory of duality of mind, which is now very generally either openly advocated or tacitly admitted to be a good working hypothesis, this intelligence has been variously designated by psychic scientists as the "secondary personality," the "subliminal consciousness," the "sub-conscious mind," the "unconscious mind," the "subjective mind," etc. I have ventured to adopt the term "subjective mind," for the reason that, unlike most of the older terms, it does not imply a theory either of causation or of its relation to the mind of ordinary waking consciousness. Besides, it is the mind which is exclusively concerned with subjective states, conditions, activities, and phenomena. But, by whatever term it may be designated, the fact remains that it possesses powers and faculties exclusively its own, and it is hedged about by distinctive limitations. Among the former is the power or faculty of telepathy, and among the latter is its constant amenability to control by the wonderful power of suggestion.

It will now be seen that each of the five foregoing propositions of spiritism may be admitted to be true without affecting adversely the argument against the spiritistic interpretation of the phenomena. Indeed, there are not to be found in the wide répertoire of

psychic phenomena better illustrations of the potency of suggestion, or of the universality of the law, than are found in the phenomena of spiritism. It is, therefore, unnecessary to question the sincerity of the medium, for the reason that if she is in a subjective or trance condition she is compelled to accept the suggestions imparted to her. Besides, it must be remembered that a medium commences her career under the dominance of the suggestion that she is dealing with spirits. Her education, her training, her whole environment, lend their aid to enforce that suggestion. Her reason tells her that it is true, for she knows of no other explanation. She has never heard of the laws of suggestion; or if she has, she either thinks that it does not apply to her case, or, more likely, she does not comprehend it at all. She only knows that in the trance condition she is dominated by an intelligence that seems to be independent of her own control. It says things that she has not consciously thought of, and it knows things that she does not remember in her normal condition. Of course she is honest in her belief that the intelligence manifested is just what it purports to be; and of course she is unconscious of having anything to do with the communications. Moreover, she may be unaware that she possesses any psychological power that would render unconscious participation possible. Thus it frequently happens that when a medium reveals something that is known only to the sitter, she denies the possession of any telepathic power whatever. Perhaps she has never indulged in experimental telepathy, *per se*, and is honestly ignorant of her own psychic powers. In any event, she is not a logician, and does not know that she is begging the question. But she is

not alone in that, for many so-called "scientists" are guilty of the same logical offence when they deny that a good medium is necessarily a telepathist.

In regard to the wonderful dramatic power often displayed by mediums in impersonating an alleged spirit, enough has already been said. It is sufficient to know that precisely the same results flow from the same suggestion to a hypnotized subject. But there is one consideration that should not be lost sight of in this connection.

Astonishment has often been provoked by the fact that a hypnotized clodhopper, normally destitute of dramatic ability, often displays wonderful powers in that direction when impersonating suggested characters. The same remark applies alike to hypnotized subjects and to mediums, and the same explanation applies to both. I venture to say that much of the mystery will disappear when it is remembered that there is, necessarily, a wide difference between conscious and unconscious impersonation. In the former the actor is normal, and is forced to study the character he seeks to imitate, to remember every gesture, tone of voice, and mental peculiarity, and to consciously reproduce the entire personality of another. In short, his effort is to identify himself with the personality he represents; and in so far as he is capable of doing so he succeeds as an actor. On the other hand, the psychic, under suggestion, completely identifies himself with the suggested personality; for he believes himself to be that person. In his case, therefore, impersonation is not "acting" in the sense in which the term is usually understood. It is simply following an irresistible impulse to carry the suggestion to its logical conclusion; and this he does easily and

naturally, just so far as he is acquainted with the character assumed — but no farther. If, now, we take into consideration the wonderful memory of the subjective mind, together with its potentially perfect powers of logical deduction from suggested premises, it will readily be seen that the law of suggestion affords a perfect explanation of the facility with which entranced mediums impersonate the characters of suggested spirits.

Cognate to this question is the fifth and last in this group, namely, Why is it that so-called "spirits," if they are not what is represented, often antagonize the medium and manifest mental and moral characteristics antipodal to those she is known to possess?

This is a very pertinent and far-reaching question; but a perfect answer is easily found in the same law of suggestion. If we will stop one moment to consider the question, What is the salient, dominating idea conveyed by the suggestion to a medium's mind that she is controlled by a spirit of some deceased person? it will be found that the main question answers itself. It is obvious that the dominant idea conveyed by the suggestion of spirit control is, necessarily, that the controlling mentality is extraneous to, and independent of, that of the medium. The logical deduction is that the medium is in no way responsible for the character of the manifestations, and that, in the multiplicity of good and bad spirits which are supposed to surround every medium, she is liable at any moment to be seized upon by some vagrant spirit whose moral character and philosophical opinions may be highly antagonistic to her own. In short, the suggestion of an extraneous personality dominating the mentality of the medium neces-

sarily carries with it the suggestion of independence; and the latter suggestion can be carried out only by occasional antagonism.

It is scarcely necessary to say that the foregoing can be demonstrated by experimental hypnotism. Indeed, it is not too much to say that all the mental phenomena of spiritism can be reproduced by that means. It is, in fact, well known to many that some of the most celebrated mediums now living have been trained to their work by means of hypnotism.

I have now briefly stated, and, I hope, fairly answered, the first group of reasons offered by spiritists for the faith that is in them. If I have omitted any important claim that pertains to the personality of the medium, I am not aware of it, and I would be thankful to be set right. I submit that thus far I have shown that all that is mysterious is easily explicable by reference to psychological laws with which science is now well acquainted.

The second group of facts and phenomena upon which spiritism pins its faith pertains exclusively to the character and contents of the "communications" received through entranced mediums from alleged spirits of the dead.

The salient features of the messages which it will be necessary to examine may be stated as follows:

1. Statements of fact known to the medium.
2. Statements of fact not known to the medium, but known to some other person present.
3. Statements of fact known neither to the medium nor to any other person present.

In the last class may be grouped:

1. Events occurring at or before the time the mes-

sage is delivered, and known to a relative, a friend, or an acquaintance of some one present at the sitting.

2. Facts known only to a deceased communicator during his natural life, a friend, a relative, or an acquaintance of his being present.

3. Facts known only to the alleged spirit during life, no relationship between decedent and any one present being known to exist.

Subsequent verification of the facts in each case is, of course, presupposed.

Again I will reduce the sum total of possible irrelevant side issues by presupposing the medium to be absolutely honest, and proceeding at once to the consideration of the various phases of the phenomena above enumerated.

The first class of communications, namely, those containing "statements of facts known to the medium," for obvious reasons need not be specially considered further than to remark, in the language of Mr. F. W. H. Myers, president of the Society for Psychical Research, that from the medium's own mind "the vast bulk of the messages are undoubtedly drawn, even when they refer to matters which the automatist once knew but has entirely forgotten. Whatever has gone into the mind may come out of the mind; although this automatism may be the only way of getting at it." — (See *Science and a Future Life*, p. 32.)

In regard to the second class of messages, namely, those containing "statements of facts not known to the medium, but known to some other person present," Mr. Myers has this to say: "Secondly, there is a small percentage of messages apparently telepathic, — containing, that is to say, facts probably unknown to the

automatist, but known to some living person in his company, or connected with him." — (*Ibid.*)

I have made these quotations from Mr. Myers for three reasons, namely, First, because he is one of the ablest and fairest of the Psychical Researchers who have committed themselves to the spiritistic hypothesis. Secondly, because he distinctly recognizes telepathy as the obvious explanation of the second class of messages. Thirdly, for the reason that, inasmuch as I shall endeavor to make it clear that all that is mysterious in any of the above-named classes of messages is easily explicable under the telepathic theory, I wish first to show definitely the point where our paths diverge.

This parting of the ways occurs when the third class of communications is reached, namely, those containing facts "known neither to the medium nor to any other person present." It is at this point that the issue is declared between the two hypotheses, — the spiritistic and the telepathic. On the one hand, spiritists decline to accept telepathy as a possible factor in the case if no one having knowledge of the facts related by the medium is actually present at the sitting. On the other hand, the advocates of the telepathic theory of explanation hold that if any living person who is in telepathic *rapport* with any one present has knowledge of the facts related, we are logically compelled to accept the telepathic hypothesis. This, of course, involves the denial on the one hand, and the affirmation on the other, that more than two persons may be concerned in the transmission of a telepathic message. And it is upon the settlement of this question that the whole controversy hinges. Reduced to its lowest terms, the question at issue may be thus stated affirmatively:

If A can, by any known means of communication, convey a message to B, B can convey the same message, by the same means, to C, other things, of course, being equal.

The truth of this proposition seems to be self-evident. It is certainly true of all physical means of communication. Why is it not true of telepathy? is a question that spiritists must solve or be thrown out of court. Telepathy is a known means of communicating facts from mind to mind. At least it is known to spiritists and Psychical Researchers, and it is to them that I am addressing my remarks. If, then, A is aware of a fact and is in telepathic *rapport* with B, he can communicate that fact to B. When that is done, the information henceforth constitutes a part of the mental equipment of B, who can, in turn, transmit the information to C (the medium) by the same means by which he received it from A. If not, why not?

This question has been asked before. More than seven years has elapsed since this hypothesis was first promulgated and this question asked. Thus far no one has ventured an answer to the question, or even to state the proposition fairly. It has, however, often been remarked that "it is carrying telepathy too far"; that it "stretches the telepathic hypothesis" all out of shape, or words to that effect; that it involves the supposition of "infinite telepathy," "omniscient telepathy," and so forth. In other words, it has thus far been dismissed by spiritists with a Podsnappian wave of the hand. Even Mr. Andrew Lang, who believes in the telepathic hypothesis, finds it expedient to throw a sop to the spiritistic Cerberus by declaring it to be a "wild hypothesis," and this as a preliminary to showing that it is

obviously the only tenable hypothesis outside the realms of superstition. (See S. P. R. Proceedings, No. 36.) Mr. Lang also gives the hypothesis a new and somewhat formidable name, "*télépathie à trois*," which, being interpreted, means telepathy by three — which is not so formidable. (*Ibid.*) I have no fault to find with the name, however, for it is a very appropriate addition to the terminology of psychic science.

Now let us briefly inquire whether telepathy *à trois* really stretches the telepathic hypothesis beyond recognition, or if it deserves to be stigmatized by its friends as a "wild hypothesis." We will begin, not with a spiritistic séance, but with a prosaic experiment in telepathy, made in the city of Washington a few years ago, the telepathist being a hypnotized subject. A gentleman from New Orleans — almost a total stranger — happened to be present, and in the course of the evening asked the telepathist to describe his (the stranger's) home in New Orleans. The description was made, and declared by the gentleman to be perfect as to all the inmates of the house; and the arrangement and furniture of all the rooms, except the parlor, were satisfactorily described, even to some of the pictures on the walls. The parlor, however, was said to be all wrong. The carpet and furniture were declared to be totally unlike anything actually in the room. The piano was described as an upright, whereas the gentleman said that it was an old-fashioned square piano. On his return home, however, he found that the telepathist was right. His wife had planned a pleasant surprise for him, and had refurnished the parlor during his absence, and installed a new upright piano, paying for it all out of savings from her allowance of pin-

money. If this was not telepathy *à trois*, will any spiritist tell me just what it was? Is it "stretching" the telepathic hypothesis to suppose that the husband and wife were *en rapport*? Is it "carrying telepathy too far" to suppose that her pleasant anticipations of her husband's return, and of his agreeable surprise, caused her to "think of him emotionally"? Did it require "omniscient telepathy" to enable the psychic to read all this in the subjective mind of the husband? In this case spirits were out of the question, for everybody concerned was very much alive, and the hypnotist and his psychic were neither of them spiritists.

I once hypnotized a lady and asked her to describe my home, which she knew nothing of. She described everything correctly, even a huge mastiff lying on a bear-skin rug on the library floor. But doubt was thrown upon her lucidity when she described the library desk as being covered with a white cloth, and said that a lady was sitting at the desk, "doing something" which she could not clearly make out. As my desk is covered with black cloth, and as ladies seldom work at it, I regarded the description as an effort at guessing. But on my return home I learned that my wife had been "doing something" with pulverized sugar, and had covered the table with newspapers to prevent accidents to the black cloth. As that was the only time in the long history of my library desk that it had been so covered or so employed, I cannot ascribe the phenomenon to coincidence. Nor can I think of any other way of explaining it than on the theory of telepathy *à trois*.

Some one, however, may say that "clairvoyance"

affords an easy explanation of both these incidents. But if he is not aware that clairvoyance itself is explicable only on the telepathic hypothesis, I refer him to such incidents as that related by Mr. Lang in the article above referred to. In a crystal-gazing experiment in London the psychic saw a vision of something that had happened to one of Mr. Lang's friends in India several days previous to the date of the experiment. It was subsequently verified, and Mr. Lang refers to it as a case of telepathy *à trois*, and also as one which excluded both the spiritistic and the "clairvoyance" hypotheses, since all were alive, and the event happened several days before the vision was seen in the crystal.

Now it must not be forgotten that phenomena cognate to the foregoing are produced every day in the year, wherever telepathic experiments are intelligently conducted. They are largely unnoted and unrecorded, for their supreme evidential value and importance are not generally understood or appreciated. That is to say, there are few among the thousands who are conducting experiments in telepathy, and still fewer of those who are invoking the spirits of the dead through mediums, who realize that upon the settlement of the question of telepathy *à trois* depends the scientific and logical solution of the whole problem of alleged spirit intercourse with the living through so-called mediums. And this I unhesitatingly affirm to be true; for if it is true that a fact communicated by one person to another by means of telepathy can then be transmitted by the second to a third person by the same means, it affords an obvious and easy telepathic explanation of every alleged spirit communication that has ever been re-

corded. A very few words will suffice to explain my meaning.

I have already shown how the hypothesis applies to events occurring at or before the time the message is delivered, and known to a relative, a friend, or an acquaintance of some one present, the spirit hypothesis being excluded by the fact that all concerned were living,—the only further remark necessary in reference to cases arising under this head being that since telepathy *à trois* furnishes a complete explanation of the telepathic experiments related, it is difficult to imagine any valid reason for changing the explanation, even if the sitting had been called a spirit séance. Thus the suggestion to the psychics in either of the foregoing cases that spirits were present to show them the rooms would have resulted precisely as it did result. Again, the suggestion might have been that the psychics were "clairvoyant," and the results would have been identical. The rooms would have been described as clearly under any one suggestion as under any other in the list. The difference, then, lies wholly in the suggestion made to the psychic, and not in the facts. Is it conceivable that the explanation varies with the suggestion under which the psychic happens to do the work? If not, there must be some one explanation applicable to all forms and kinds of suggestion, and the only tenable solution is necessarily one that rests on a *vera causa*. I submit that the telepathic explanation is the only one that is thus sustained. That is to say, we know telepathy to be a power of the subjective mind, and we know that all psychics assume the hypothesis suggested to them, whether it be spirit control, or clairvoyance, or telepathy pure and simple. I submit that we have neither logical

right nor occasion to ascribe to supermundane origin any phenomenon that is explicable by reference to efficient causes that we know to exist, inherent, in the minds of living people.

The next class on the list, namely, communications embracing facts known only to the deceased during his life, a relative or a friend being present at the sitting, can easily be accounted for on the theory of telepathy *à trois*, since friends, relatives, and acquaintances are well known to be, potentially, *en rapport* at all times. The facts in the supposed case may have been telepathically communicated years before the death of the agent; but as the memory of the subjective mind is potentially perfect, the facts may be drawn forth by telepathic agency at any subsequent time under proper conditions. There are, however, many cases, apparently belonging to this class, where the sitter's ignorance of the facts is due to forgetfulness. In other words, he may have known the facts and entirely forgotten them. As Mr. Myers justly remarks, "whatever has gone into the mind may come out of the mind." Such a case, however, would not be telepathy *à trois*. But it would be obtaining telepathic information residing exclusively in the subjective mind — or, as Mr. Myers would say, the "subliminal consciousness" — of the sitter. And so would the same information received telepathically by the same sitter reside exclusively in his subjective mind. Will some good spiritist please explain why information can be drawn from the sitter's mind by means of telepathy in one case and not in the other? *Prima facie* the conditions are parallel, except as to the means by which the sitter obtained the information; and I submit that the *onus probandi* rests upon the

advocates of the spiritistic hypothesis. To shift that burden they must demonstrate that telepathy *à trois* is impossible. Until that is done they have no logical standing in a court of inductive inquiry.

This brings us to the only remaining class of communications, namely, those which embrace statements of facts which were known only to the deceased during his life, no relationship between him and any one present being traceable.

Obviously such cases present great difficulties, not the least of which would be the verification of the alleged facts. Thus, if a spirit should present himself to a company of total strangers, it would be very difficult to verify anything that he might say. But should that difficulty be surmounted, it would be practically impossible to prove that all knowledge of the fact was confined to the deceased; and it would be absolutely impossible to prove that a knowledge of the facts was not possessed by some one who was in telepathic *rapport* with somebody present at the sitting. And yet, assuming that telepathy *à trois* is a valid explanation of all the other classes of phenomena in the list, all this negative proof would logically be required in order to justify the conclusion that the obscure cases, cognate to all the others as they are in every essential particular, are governed by different laws and originated in a different world. In other words, having shown that in all cases where the facts are known the telepathic hypothesis affords an easy and an obviously true explanation of the phenomena, we have a logical right to assume, until the contrary is demonstrated, that were the facts known in the obscure cases the same explanation would be equally obvious.

The importance of this rule of evidence will be apparent upon reflection; for it will at once be seen that the adoption of a contrary rule would be the logical equivalent of a distinct repudiation of the inductive method of research. And this is precisely what is done in the highest spiritistic circles to-day, little of importance being heard from that source aside from voluminous dissertations upon the immense evidential value of the obscure cases. That is to say, in every case where telepathic connections, owing to ignorance of environmental conditions, are not entirely obvious and indisputable, they are instant in the declaration that that particular phenomenon is demonstrative of the truth of the spiritistic hypothesis.

Considered as a method of inductive inquiry, this is certainly unique. It is not a new proposition that "ignorance is the mother of superstition"; but it can safely be asserted that since the day when Bacon taught the scientific world the value of a fact, this is the first time that ignorance of facts has been assumed to constitute valid inductive evidence of the existence of supermundane beings.

This part of the claims of spiritism, however, may be safely left to take care of itself when the vital issue is settled. That, as I have pointed out before, relates wholly to the question whether information received telepathically can be transmitted to a third person by the same means. If that question is settled affirmatively, together with all its implications, antecedent and consequent, it will be simply impossible to imagine a case that would not be explicable under the telepathic hypothesis. That the proposition is true, I cannot entertain a doubt; and so believing, I can but regard

the logical attitude of spiritism as grossly violative of that fundamental axiom of science which denies our logical right to seek in supermundane realms for causes that can be found in the domain of natural law.

V

SPIRITISM AND TELEPATHY AS INVOLVED IN THE CASE OF MRS. LEONORA E. PIPER¹

IN constructing a title for this paper, I have not been impelled to use the name of Mrs. Piper because I imagine that her recent statement in the *New York Herald* has settled the question of spiritism adversely to the claims of that cultus. I have not so high an estimate of the value of her opinion. Nor do I agree with her spiritistic enemies in holding that her opinion is valueless because of the amnesia incident to trance. This, at most, would place her on a level with outsiders, — and this is their contention. It must be remembered, however, that not only was Mrs. Piper present at all her séances, but that she had the benefit of subsequent discussions of her phenomena by the able savants who had her in charge, and that she must have read their subsequent reports with much more than ordinary interest and intelligence. Moreover, we must not forget that she has been subjected, on two hemispheres, and during nearly a score of years, to a key-hole espionage by the ablest detectives of the London Society for Psychological Research; and that she has

¹ Read before the Psychological Section and the Medico-Legal Society in joint session, Dec. 18, 1901.

emerged triumphant, both at home and abroad, — not a shadow of a suspicion resting upon her character in any relation of life. Testimonials to this effect from all the leading members of the Society for Psychical Research have been numerous and voluminous, and almost hysterical in their insistence; so that she stands before the public to-day, secure in the possession of the highest possible credentials in proof of her absolute honesty, integrity, and purity. It is also in evidence that she is liberally endowed with that rarest of all mental attributes, — common sense, — the inseparable concomitant of the cardinal virtues. It is idle to say that the opinion of a woman thus endowed, and thus fortified by all that gives sanction to human testimony, and who necessarily knows more than any one else can know of the workings of her own inner consciousness, is not of greater value than the opinion of an outsider.

Nevertheless, as before remarked, her opinion does not settle the question; and in this respect she remains on a par with all who have opinions on the subject. It is not, therefore, because of her interpretation of her own phenomena that I use her name; but because the investigation of those phenomena by the Society for Psychical Research marks an epoch in the history of Spiritism. It is of that investigation that I propose to offer a few remarks. In doing so I shall not attempt an exhaustive criticism of the methods of investigation employed by the members of that society. I shall merely attempt to point out briefly what I conceive to be the proper method of studying the phenomena in the light of their latest reports detailing the proceedings at the Piper séances.

Never before in the history of the scientific investi-

gation of modern spiritism have the conditions been so favorable for the production of decisive results, one way or the other, as in this case. An ideal "medium," mentally, morally, and psychically considered, is conceded, — nay, strenuously insisted upon, — by all the investigators. She has been absolutely under their control during a long series of years, and necessarily free from the adverse influence of the Philistines. That the investigators are also all that can be desired will be as freely conceded. They are all gentlemen of great ability, uncompromising integrity, and vast learning. Best and most important of all, they have a thoroughly logical appreciation of what it is necessary to prove in order to establish the claims of spiritism. That is to say, they know that the one thing needful is proof of personal identity on the part of the *soi-disant* "spirits" who "communicate." In this all-important attitude they stand in violent contrast to that long line of so-called "scientific investigators," on either side of the question, who have imagined, on the one hand, that the essential claims of spiritism can be established by verifying the physical phenomena; and, on the other hand, that those claims can be disproved by catching a trickster in the act of simulating psychical phenomena by legerdemain. In other words, they know that the purely physical phenomena of spiritism possess not the slightest evidential value, pending the settlement of the all-inclusive question of personal identity. They know, for instance, that if a piano should be levitated to the ceiling without physical contact or mechanical appliances, and all the rest of the household furniture should go into convulsions, the question would still remain whether the energy displayed proceeded from discarnate spirits, or was

due to the "psychic force" (Crookes) of the medium. Hence they have wisely determined to ignore all physical phenomena, and to confine their attention to such mediums as Mrs. Piper, through whom, according to the spiritistic hypothesis, spirits can establish their identity by direct conversation with the sitter.

It is but simple justice to the British members of the Society for Psychical Research to say that to them the credit is due for thus divesting the subject of all those irrelevant side issues which have heretofore served but to obscure the real question. It is, however, with a glow of patriotic pride that we recall the fact that they were compelled to come to this country for an honest medium, and to draw upon our universities for a man capable of conducting a spiritistic propaganda in the highest style of the art. It is but a matter of common justice to say that Professor Hyslop is the ablest psychical researcher who has yet attempted a personal investigation of the Piper phenomena. He is the peer of the best in scholastic attainments; he is professor of logic in Columbia University; his honesty is transparent, and the report of his investigations covers 649 pages of the *Proceedings of the Society for Psychical Research*.

If, therefore, he has failed to make a case for spiritism, one never can be made this side of the borderland; for there probably can never again be assembled under one roof such a combination of favorable conditions and instrumentalities. If there was an unsound element in the combination it did not reside with the medium, nor in the character or ability or attainments of the investigator. Nor do I see the slightest reason for distrusting his statements of fact. His deficiencies, therefore, if any are to be found, must be either in

logic, or in the propædeutics of psychic science, or in both.

The discussion of the subject will be conducted under two heads: 1, The issue that Professor Hyslop has defined; and 2, The issue that Professor Hyslop has ignored.

Referring at large to the phenomena detailed in his report, Professor Hyslop says:

“The issue that is presented here is simply whether spiritism, or telepathy from living persons exclusively, is the more rational hypothesis to account for the facts.”

It will thus be seen that the learned professor of logic assumes at the outset that the two hypotheses stand on an equal footing, thus forgetting for the moment the logical axiom that supermundane causes must never be assigned to phenomena so long as they or their cognates are explicable by reference to known natural causes.

To hold spiritism strictly to this rule, however, would be to end the discussion before it begins, for all admit that the “great bulk” (Myers) of the supernormally acquired knowledge of mediums is due to telepathy. It would, therefore, require demonstrative proof to overcome the logical implication that all such knowledge is not thus acquired; just as it would require the production and public exhibition of a “white crow” (James) to prove that crows are not all black. It would, however, require but one white crow for that purpose, and it would require but one demonstrated case of survival of personal consciousness after the death of the body to prove the essential claim of spiritism,—a future life. But this one case has not yet been produced, and Professor Hyslop is frank enough to admit that he has demonstrated nothing. (See note

on p. 4 of his report.) The issue, therefore, as he has defined it, is conservative and legitimate.

To prepare one for an intelligent discussion of the question whether spiritism or telepathy is the more rational hypothesis to account for the phenomena produced by Mrs. Piper, it would seem that the essential prerequisite would be a knowledge (1) of the facilities and the difficulties, real or supposed, incident to communicating with spirits of the dead, and (2) of the methods, powers, and limitations of telepathic communication between living persons. Unfortunately we can know nothing of the former except what spiritists tell us; and their stories are so contradictory that it is impossible for the layman to assign any certain limits to the difficulties or to the facilities. Thus, the old spiritists tell us that communication is always easy, provided we have a good medium and a harmonious environment. The late Professor Hare, for instance, found no difficulty whatever in organizing a "convocation of spirits" of the ablest dead men he could think of, who cheerfully submitted to a prolonged catechism. To say that Professor Hare learned from that "convocation," and others equally well posted, all that was worth knowing about the spirit land and other things, would be to limit unduly the scope of the acquired information. Judge Edmunds was equally fortunate in obtaining authentic information, not only of the geography and topography of the spirit land, but of its current philosophy; whilst Andrew Jackson Davis succeeded, without apparent effort, in tapping the philosophers of all the ages for material for upwards of thirty volumes of most remarkable literature. Thousands of others were equally fortunate in obtaining access to the

inhabitants of all the spheres. Nor were the spirits themselves in the habit of complaining of lack of facilities, even when a Daniel Webster addressed his sitters in the language of a stevedore; or Noah Webster spelled Jehovah with a little g, or Lindley Murray split his infinitives into kindling-wood. The enemy might blaspheme, and to do them entire justice they did, but the spirits themselves were oblivious to all such degenerative implications. They did not complain of difficulties of communication, nor of the failure of "light," nor of infirmities due to their last illness of the body, nor of the failure of memory, nor of any of the multi-form infirmities which afflict Mrs. Piper's familiar spirits when submitting to a scientific examination. It is true that there were occasional lapses of memory, as when Socrates forgot that he had been a Greek philosopher, when proudly recalling his career as a Roman Senator. This lapse, however, was afterwards explained by an erudite spiritist by saying that those "old fellows" have been dead so long that they have forgotten the "unimportant particulars" of their earthly lives. Satisfactory as this explanation is to spiritists, it does not explain the amnesia of another spirit at the same sitting who had forgotten his own middle name within a year after entering the spirit land. Nor does it explain the prompt response of "Cantharides, the Greek philosopher," when that coleopterous "personality" was summoned by a waggish Philistine. That, however, was easily explained by the statement that there are always spirits present at séances who delight in serving the cause of Truth by promptly "meeting fraud with fraud." In the logic of spiritism this formula has always occupied a foremost place, and it still

performs yeoman's service whenever a fictitious personage responds with alacrity to a summons.

But then, as now, there were mediums and mediums. Some were ignorant, and others were educated. Some of them were destitute of the ability to acquire information by supernormal means; whilst others could at times correctly name the strangers present at their séances, and describe and name a long list of their friends, living or dead. At other times the same mediums would fail miserably. In a word, the same diversity of mediumistic powers prevailed then as now; the same "harmonious conditions" were requisite; and supernormally acquired knowledge on the part of mediums was even more common than it is to-day. But there was one significant circumstance connected with early mediumship that does not prevail at this time; and that is that modern spiritism found a host of ready trained psychics in the mesmeric subjects of that epoch. Mesmerism was at the zenith of its popularity, mesmeric subjects were numerous, and under mesmeric methods telepathic powers were easily developed, and the exhibition of those powers was commonly the *pièce de résistance* of the stage curriculum. But the significant part of it was that, not only was every mesmeric subject found to be a good medium, but the best of the mediums, that is to say, those who could demonstrate their possession of knowledge supernormally acquired, were for a long time drawn almost exclusively from those whose telepathic powers had been previously developed by mesmeric methods. This fact was noted at the time by the opponents of spiritism, and telepathy was thus shown to afford an easy explanation of all supernormally acquired information. Indeed, Dr. Dods, a noted

mesmerist of that day, paralleled every phase of that class of spiritistic phenomena by the employment of mesmeric psychics and processes. With Dr. Dods it was but the a b c of mesmerism to develop telepathic powers in his subjects so perfectly that they could correctly describe events wholly unknown to the psychic or to any other person present. And this is all that the best mediums can ever do. It is all that spiritists claim can be done in proof of personal identity. It is true that in experimental telepathy the "dramatic play of personality" is necessarily lacking. Of this "dramatic play" Professor Hyslop discourses exhaustively, seemingly oblivious of the fact that trance subjects are dominated by the inexorable law of suggestion; and that any suggested character will always be dramatically personated, and with marvellous fidelity to the original, be it a dog or a philosopher, a spirit of health or a goblin damned.

This, however, is a digression. The point I wish remembered is that the alleged difficulties of communication by spirits seem to be widely variant; and that the facility in each case appears to be proportioned, not to the mental capacity of the spirit, but to the psychic powers of the medium. This, to say the least, is not what one would naturally expect, if the communications were from spirits. But we know that if the phenomena are to be explained by telepathy, the psychic powers of the medium must necessarily be the measure of limitation.

But, as before remarked, it is impossible to know what are the difficulties which beset communicators from other worlds than ours. One thing, however, appears to be beyond question, if we are to accept the

testimony of spiritists, and that is that the spirits are as voluble as fishwives when they tell us something that can neither be verified nor disproved; but when subjected to anything like a scientific investigation their volubility is succeeded by a remarkable want of facility of clear and unequivocal expression, and they are troubled by a constantly recurring failure of "light." At critical moments their memory fails them, and they forget their own names and those of their nearest relatives. At other times, however, they have lucid intervals, the light is clear, and they can give names and dates with great facility, besides giving information that neither the psychic nor the sitters could have previously obtained through sensory channels.

These are some of the salient features of the limitation and of the power displayed by Mrs. Piper's spirits for the benefit of science and Professor Hyslop. And it must not be forgotten in this connection that special facilities were provided in his case for easy, free, and unlimited communication, without reference to the infirmities that might happen to afflict the particular spirits called for. To that end two great spirits were imported from England to act as amanuenses and advisers generally. They were specially well qualified by experience, having already acquired an international reputation by acting in the capacity of familiars of the late W. Stainton Moses. They were good, and wise, and great; and their names, respectively, were "Imperator" and "Rector,"—names well calculated to impress. That they were good is evidenced by their uniformly pious language and deportment. That they were wise is shown by their refusal to reveal their own identity. That they were great is demonstrated by the

fact that they had, before emigrating to America, evolved a system of spiritistic philosophy that converted an English orthodox clergyman from the error of his ways.

Manifestly the performance of such a feat must have required unlimited facilities for communication, plenty of light, a retentive memory, and an unflinching vocabulary. And it is in evidence that they had all these, and much more, under the mediumship of Stainton Moses. But it was all in violent contrast with the paralytic conditions prevailing under the Piper-Hyslop régime. I think that spiritists will agree with me that the contrast is due to variant mediumistic powers, rather than to varying facilities for knowing things, and communicating them, on the part of the same spirits. If, then, it is due to the variant psychic powers of the mediums, I have a right to assume, provisionally, at least, that the limitations, always most in evidence when personal identity is in question, are the limitations of telepathy between living persons.

This leads us to the second branch of our inquiry, namely, as to "the methods, powers, and limitations of telepathic communications between living persons."

As I promised merely to suggest in this paper the proper method of studying Professor Hyslop's report from a scientific standpoint, I shall, in pursuing this branch of the inquiry, cite but a few illustrative examples showing that the successes and the failures of his alleged "communicators" were just such as are incident to telepathic communications.

The following propositions are too well authenticated and understood by all intelligent psychical researchers to require proofs to sustain them:

(1) Telepathy is a power belonging exclusively to

the subjective mind, or the "subliminal self," as it is frequently designated by the Society for Psychical Research. That is to say, the objective mind, or "supraliminal self," which is the mind of ordinary waking consciousness, is not necessarily aware of the content of the subjective mind. Hence the phenomenon of "latent memory," as Sir William Hamilton designated it many years ago. That is, knowledge once acquired may remain latent in the subjective mind for an indefinite period. It may, however, be elevated above the threshold of normal consciousness in many ways, as by automatic writing, etc., or it may be reached by telepathy.

(2) Telepathic powers are best developed under abnormal conditions, as in trance, or in spontaneous or induced somnambulism.

(3) These powers vary in efficiency with different psychics, and in the same psychic they vary at different times, and under varying conditions which are not yet clearly defined.

(4) *Rapport* is, of course, always necessary; but the essential conditions of *rapport* are not yet clearly understood. It is known, however, that relatives and friends are either actually or potentially *en rapport* at all times.

These fundamental facts will not be disputed; and when they are considered in connection with the prodigious — if not perfect — memory of the subjective mind, it will be seen that no limits can at present be assigned to the potentialities of telepathy. Its limitations, however, are more clearly defined and understood. Hence it is that one who is acquainted with those limitations and their proximate causes is better qualified to account for the failures of telepathy than any one can be to assign limits to its potentialities. But it so

happens that even a knowledge of the causes of failure is of great value in enabling one to know to what class a particular phenomenon belongs.

The fundamental difficulty in telepathic communication consists in the fact that the power is not adapted to practical mundane uses. It seems, in fact, to be a means of communicating thoughts especially adapted to a disembodied existence; for it is never available here except under abnormal conditions. Even under the most favorable conditions the thoughts communicated must be interpreted, so to speak, in terms of our sensory experience. That is to say, the percipient must be caused to see something (visions) or hear something (clairaudience) that will enable her to grasp the idea sought to be communicated.

It will at once be seen that the inherent difficulties of telepathic communication are great, and in the conveyance of abstract ideas they are practically insuperable. It is true that if a psychic is clairaudient, and conditions are perfect, much may be conveyed in words. But clairaudience is a rare faculty, and perfect conditions hard to obtain; and when obtained they rarely last long enough for purposes of scientific investigation. We may, therefore, confine our attention to the most common methods of communicating telepathic information, which is by causing the percipient to see visions that convey the idea. I shall do this, not only because it is the most common method, but because it is, all things considered, the best that has yet been devised; and for further reason that it is evidently the one employed in the Piper séances.

It is obvious that intelligence communicated by means of visions must be extremely limited in scope and sub-

ject matter. It is, in fact, just that kind of information that can be conveyed, in objective life, by a series of pictures; or, at best, by pantomime. Anything, therefore, that can be told by a picture, as for instance, a tragedy, can be very clearly reproduced by a good psychic, under good conditions. But abstract ideas cannot be thus represented. Symbolical visions, it is true, may sometimes convey such intelligence to a very limited extent; but its limitations are obvious. Again, under favorable conditions a vision may be very distinct; but those conditions are subject to frequent changes, and for no assignable cause; so that at one moment a psychic may be very lucid, and at the next be groping in the dark. This literally describes the situation when conditions fail; for telepathic visions, when the psychic's eyes are closed, come out of the darkness, with varying brilliancy, when conditions are favorable; and fade into it again, with varying indistinctness, when conditions fail. In a word, the lucidity of a telepathist is proportioned to the clearness of her visions; and the clearest of them are often evanescent, unstable, and "variable as the shade." Mrs. Piper's *soi-disant* spirits, therefore, described an actual want, in literal terms, when they so often complained of the failure of "light." Again, it frequently happens that the fault is not in the psychic so much as in the sitter; for the clearness of a telepathic vision depends largely upon the power of visualization possessed by the subjective mind of the agent or sitter. This power varies in intensity in different individuals; and in the same person it fluctuates within very wide limits. The reasons for this are not yet clearly understood; but it seems to depend upon the passivity of the individual. Hence it is that trained psychics make the

best sitters or agents; for they are habitually passive at séances, and their subjective minds are habitually active, — and that mind is the source of all information in telepathy. On the other hand, a novice often defeats the object of a séance by his over-anxiety, or want of passivity, to say nothing of his lack of subliminal training.

It should be here noted that telepathic messages cognized clairaudiently are subject to the same limitations of power and fluctuations of conditions. That is to say, a clairaudient psychic does not always hear clearly, any more than does a clairvoyant psychic always see clearly. Hence it happens that in either case, when conditions are imperfect or fluctuating, proper names are difficult to perceive. Some psychics, however, are both clairaudient and clairvoyant, to a limited extent, and thus have two strings to their bow. But even they are subject to the same uncertain conditions and limitations, and hence cannot always be certain of proper names; or, for that matter, of anything else. I mention proper names particularly because the failures in cognizing them, by even the best of psychics, are frequent in so-called spirit intercourse as well as in experimental telepathy, and presumably for the same reasons.

One important fact remains to be noted, and that is that proper names, and sometimes other words, and even short sentences, are telepathically conveyed to clairvoyant psychics by means of visions of printed or written words, projected into the field of psychic vision. Obviously, the foregoing remarks relating to the varying conditions of telepathic lucidity, apply with peculiar force to phantasmic representations of words or phrases, and especially of proper names.

I have now stated a few of the salient powers and limitations of telepathy with especial reference to the difficulties habitually encountered in communicating intelligence by that means. They are among the proædeutics of psychic science, without an understanding of which it is impossible to appreciate either the potentialities of telepathy, or intelligently to assign causes for its multiform failures and limitations. With an understanding of them we can at least judge, with proximate certainty, in any correctly reported case, whether the difficulties encountered are such as are incident to telepathy. If we find that they are, we have a right to assume telepathy to be the true explanation of the mysteries, at least until it is definitely shown to be either inadequate, or impossible, or both. Professor Hyslop has essayed the task of proving that it is both inadequate and impossible; but to do so he assumes the existence of difficulties that do not exist except in his imagination, as I shall attempt to show in its proper place.

First, however, I desire to suggest the proper method of analyzing his report by citing a few illustrative examples, taken at random, showing beyond a reasonable doubt that telepathy affords an explanation of all the phenomena he describes. In doing so I shall assume, provisionally, that all the supernormally acquired information possessed by the medium existed, latent, in the subjective mind of the sitter. How so much of it got there is a question second to none in importance; but it must be deferred for the moment.

The first point to which I wish to invite attention relates to proper names. Those who have read the report (*S. P. R. Proc.*, Part XLI. Vol. XVI.) will re-

member the constant alternation of lucidity and amnesia on the part of somebody, — spirits or Mrs. Piper's subliminal, — when the names of alleged communicators were called for. Often the name would be given with gratifying promptitude; but at other times — when the "light" failed — there would be groping, guess-work, "fishing" for clues, and sometimes total failure, followed by very voluble explanations that did not explain. Time and space forbid the citation of special examples; but they confront us almost everywhere in the report. Professor Hyslop tells us that it is all due to the limitations of spirit power, first, to remember the simplest facts of mundane experience, and, secondly, to communicate that knowledge through the best of mediums. Of these limitations we can know nothing, of course, except what Professor Hyslop tells us. But how does he know? He also informs us that the trouble is not due to the limitations of telepathy, because telepathy has no limitations. That is to say, he holds that the phenomena in question cannot be due to telepathy if telepathic knowledge is not "infinite," or "omniscient," — which is a very easy, if not a logical, way of disposing of a difficulty. Of this, later on.

Nevertheless, any one who knows anything at all of telepathy is aware that it is hedged about by just such difficulties in regard to names as were encountered in the Piper-Hyslop séances. Moreover, to suppose that those difficulties were due to the mental status of the spirits themselves, involves implications of degeneracy not warranted by current spiritistic philosophy.

Again, there are many other phenomena detailed in the report which point clearly — almost demonstrably — to telepathy; as, for instance, when the medium —

or the *soi-disant* spirit — undertook to state the disease of which he, or some one else, died. In one instance it was incorrectly stated as typhoid fever; and in another it was correctly stated as throat disease. Obviously, typhoid fever could not well be represented by a phantasm, but a sore throat could be easily represented by a vision of a person with a bandaged throat.

Much stress has been laid upon the fact that a certain jack-knife, belonging to Professor Hyslop's father, was correctly described, together with some of the uses for which it was employed during its late owner's lifetime, such as paring his nails, etc. I submit that it is not difficult to imagine the projection of a phantasmic jack-knife upon Mrs. Piper's field of psychic vision; nor would it seem to be difficult to guess at some of its uses, even without the aid of a phantasm.

Again, much of evidential value is attached, by Professor Hyslop, to the fact that Mrs. Piper correctly described a skull-cap once worn by his father; but the name of the person with whom it was left was difficult to obtain. This very clearly illustrates the foregoing remarks relating to the comparative difficulty in obtaining names by telepathy.

I might cite many more examples of a similar character, — but time and space forbid. But they will serve to suggest to the student the proper method of analyzing the Piper phenomena as reported by Professor Hyslop. All that is necessary is to bear in mind the methods of telepathy and its consequent limitations. When this rule is intelligently observed there will be found no difficulty in the telepathic explanation of all that seems so mysterious to Professor Hyslop.

As before remarked, I have thus far assumed that

all the supernormally acquired knowledge of which Mrs. Piper was possessed was not only obtained telepathically, but that it was obtained directly from the subjective mind of Professor Hyslop. This the learned Doctor would strenuously deny, on the ground that the great bulk of the information upon which he relies to prove his case for spiritism, was never known to him before he obtained it from Mrs. Piper, — but was, however, subsequently verified. And I freely admit that neither Professor Hyslop, nor any other person present at the Piper-Hyslop séances was ever in conscious possession of any of the facts revealed by the trance personality of the medium, prior to the date of the séances.

The question now arises, — and this is the crucial question for spiritism, — how did Mrs. Piper obtain that wonderful fund of information which she so haltingly gave out at those famous séances?

Before attempting to answer this question from my own point of view I will state the position of Professor Hyslop.

To do entire justice to the intelligence of the learned professor, he does not seriously deny the fact of the existence of telepathy as a possible factor in some cases. On the other hand, however, he holds that spiritism is the preferable hypothesis for the explanation of the Piper phenomena, for the reason that the telepathic theory necessarily presupposes "infinite knowledge" on the part of the psychic. It is, therefore, in his mind, "spiritism against omniscience" (page 134). No wonder that he "halts" on page 133, and becomes "suspicious" on page 136, and actually "gasps" on the same page "at the magnitude of the theories that are invented to sustain the case against spiritism." And well may

skeptical science also "gasp," not to say, "throw up the sponge," if it has at last come to pass that the hypothesis of superstition can be disproved by no other argument than one that is based upon the presupposition that Mrs. Piper is omniscient.

To do Professor Hyslop justice it must be said that he did not invent the theory. That he believes it, or thinks he does, is evinced by his constant reiteration of it; but he manages to throw the blame of it upon Dr. Hodgson (p. 157). In defence of Dr. Hodgson it should be stated that he is not wholly responsible; for Dr. Bovee Dods, in one of his lectures, gave utterance to a similar extravagance when undertaking to account for the supernormally acquired knowledge of his mesmeric subjects. (See his lectures on spiritism, pp. 83-4.) To his credit be it said, however, that his extravagant notions did not extend to implications of omniscience; and in further extenuation it must be remembered that he wrote fifty years ago, and knew nothing of the later development of experimental psychology. Nevertheless, he did develop telepathy in his subjects to such an extent that they came into possession of knowledge of facts not previously known to any one present. But, how to account for the fact, he knew neither more nor less than do the ablest spiritists of the Society for Psychical Research spiritistic propaganda. He did know, however, that spirits of the dead had nothing to do with it.

The question now is, is it necessary to suppose that Mrs. Piper was possessed of "infinite knowledge" in order to account for her possession of information not previously existent in the normal consciousness of any one present? Is it necessary to suppose that she is either actually or potentially in communication with the

“whole Universe of intelligence” in order to account for the facts? Is it even necessary to suppose that she was in telepathic communication with any one on earth, or in heaven above, besides Professor Hyslop? I think not.

It seems to me that it is only necessary to suppose that Professor Hyslop was *en rapport* with the members of his own family, in order to account for his possession, subliminally, of all the knowledge that was in evidence at the Piper séances. Certainly there is nothing in the history of telepathic investigation to negative this proposition. Indeed, it may be confidentially asserted that if observation and experience teach us anything at all in reference to that mysterious power, it is that relatives and friends are always *en rapport*, and that they are always either actually or potentially, in communication. This is, perhaps, the most important induction possible in the case, and it certainly makes for the telepathic theory; for all the “communicators,” of evidential importance, were relatives of the sitter. As yet we know little of the power of telepathic acquisition of knowledge; but all that we do know goes to show that it is enormous. The limitations apparently pertain wholly to the power of communicating the acquired intelligence, as I have already shown. It is also known that the great bulk of subliminal intelligence remains latent indefinitely, and is never, except under abnormal conditions, elevated above the threshold of normal consciousness. It is also in evidence that subliminal memory is prodigious, — potentially, if not actually, perfect; so that what once enters that storehouse of memory is always available under favorable conditions.

These are a few of the inductions of modern psy-

chological science pertinent in this case; and it cannot be successfully controverted that they afford a full explanation of the fact that the knowledge which Mrs. Piper obtained existed in the subjective mind of her sitter. I submit that it is a far call between "omniscience" and the conclusions derivable from the fundamental facts of psychic science.

The only question now remaining is whether the knowledge which, presumably, was thus telepathically acquired, was conveyed by the same means to Mrs. Piper's subliminal consciousness.

This is the issue which Professor Hyslop has seen fit to utterly ignore. And yet it is really the only pertinent issue in the case. To reduce it to its lowest terms, it is this:

Can information, telepathically acquired, be telepathically transmitted to a third person?

If it can, spiritism, considered as a scientific proposition, has not a leg to stand upon; for not a case has yet been recorded that cannot be telepathically explained if that simple proposition is true. There may be cases where the chain of telepathic transmission is difficult to trace. But so momentous a proposition as spiritism embraces cannot be logically sustained by an occasional failure of positive evidence against it. There are no logical presumptions in favor of a supermundane explanation of any phenomenon whatever. Indeed, the presumptions are all against it, even in the absence of evidence to disprove it; and when, as in this case, the great bulk of cognate phenomena are explicable by reference to known mundane causes, all supermundane hypotheses are summarily ejected from the court of logical inquiry.

The question, then, recurs, — “can telepathically acquired information be telepathically transmitted to a third person?” My proposition is this: A message transmitted from A to B, by any means of communicating human intelligence, can be transmitted, conditions being equal, from B to C by the same means.

This is a very simple proposition, and its truth is self-evident. It is what Herbert Spencer would denominate a “universal postulate”; for “its opposite is inconceivable.” Besides, it has been demonstrated, again and again, by experimental telepathy, that telepathy by three, or as the French call it, “*télépathie à trois*,” is not only a possible, but a very common, phenomenon.

There is nothing left, therefore, for spiritism to do but to deny a self-evident proposition, for, if it is true, the telepathic hypothesis covers, not only every case cited by Professor Hyslop, but every case within the range of human conception.

In conclusion, I beg leave to say one word to both the friends and the foes of spiritism, in commendation of Professor Hyslop’s report. The former will find it to be the ablest effort yet made to give spiritism a scientific status. If he has failed it is not for lack of zeal or ability. The latter will find in it a transparently honest report of the details of each séance. This is all that science can ask of a reporter of phenomena. It will take care of its own conclusions. If the internal evidence of the report overwhelmingly defeats the object of his argument, Professor Hyslop has not concealed the fact. Considered from any point of view, — as a literary production, as a defence of spiritism, as an honest report of facts, or as an effort to obscure the vital issues involved, it is the ablest spiritistic document extant.

Has spiritism no better method of refuting the arguments in favor of the telepathic theory than to exaggerate, distort, and misrepresent it in order to find an excuse for answering it with a point-blank denial or a sneer? It seems not.

Dr. Hodgson, the official spiritistic propagandist of the Society for Psychical Research, set the pace some years ago, and the rest have obediently followed in his footsteps ever since. Thus, in his report on the Piper phenomena (see p. 394, Part XXXIII., S. P. R.), he tells us just what must be presupposed if we are to accept the telepathic explanation of said phenomena. To do the learned Doctor justice, he begins by candidly admitting that "if the information given at the sittings, both in matter and form, was limited to the knowledge possessed by the sitters, we should have no hesitation in supposing that it was derived from their minds, telepathically or otherwise." But, as some of the information given out was held not to be thus limited, he proceeds to say:

"We must then make the arbitrary suppositions that Mrs. Piper's percipient personality gets into relation with the minds of distant living persons, (1) who are intimate friends of the sitters at the time of the sitting, and (2) who are scarcely known, or not at all known, to the sitter. And many of these distant living persons had, so far as they knew, never been near Mrs. Piper. These cases then compel us to assume a selective capacity in Mrs. Piper's percipient personality, and not only selective as to the occurrences themselves, but discriminative as to the related persons."

If all this were true, it must be confessed that the telepathic hypothesis would be hedged about with serious logical difficulties. Fortunately it is not true, as I shall show later on. But this is nothing compared with the

logical consequences involved in the telepathic hypothesis, which are, in part, set forth by Dr. Hodgson in words following, to wit:

“And I may add here that these arbitrary suppositions may be increased yet further to cover other forms of evidence that may be obtained hereafter, such as the giving of information supposed to be possessed by the dead alone, or the manifestation of knowledge not yet acquired by the human race, so far as we are aware, such as the existence of heavenly bodies previously unknown, or the customs of the inhabitants of other planets, verified, let us assume, in future years.”

It will thus be seen that the learned Doctor has found no difficulty in frightening himself away from the telepathic hypothesis by the simple process of constructing a few “arbitrary suppositions.” And it must be admitted that the “supposition” that the inhabitants of this earth can communicate telepathically with the inhabitants of “unknown” planets, is well calculated to frighten almost anybody who is not a spiritist, especially if he is told that he must believe it as a logical penalty for believing in the telepathic explication of Mrs. Piper’s phenomena.

But, robust and strenuous as are Dr. Hodgson’s suppositions, they are feeble in comparison with those of his pupil, Dr. Hyslop. As I have shown in my opening article, that gentleman holds that the telepathic explanation of the Piper phenomena is absolutely untenable except under the presupposition that that lady is “omniscient,” or at the least is endowed with the ability to draw at will upon “the whole universe of intelligence.” Thus believing, he is enabled to quiet his logical conscience when he ignores the real issue in the case.

Hon. Luther R. Marsh is another who finds a way to avoid the necessity for argument by the same general

process. He tells us that the telepathic hypothesis requires the assumption that the sitter must be omniscient, or words to that effect. That is to say, his mind must be filled with "an endless arcana of knowledge,"—"chuck-full" of "all things that have ever transpired in the world, and in the spirit sphere."

This is a decided modification of the assumptions of Doctors Hodgson and Hyslop, who hold that the telepathic hypothesis requires us to assume that the medium is "omniscient." To do Mr. Marsh entire justice, it must be said that his assumption is just as sensible, and just as near the truth, as that of Doctors Hodgson and Hyslop. They are both designed, apparently, to exaggerate the claims of their opponents for the purpose of denying them.

Judge Dailey presents another modification of the same polemical weapon. It is not so extravagant as those we have named; but the design is identical. I refer to what he says of my proposition relating to telepathy by three. He quotes the proposition and then proceeds to say that it means something that is obviously foreign to its plain import.

And now comes the Rev. Dr. Savage, with still another modification of the same assumption, in which "unlimited powers" and "universal knowledge" are supposed to be necessary to enable the medium to do her work by the aid of telepathy.

Now, let us examine this question in the light of what is known of telepathic powers, and see if these extravagant assumptions are really a necessary part of the telepathic theory when it is invoked to account for spiritistic phenomena.

First, however, let us try to find a common ground of

agreement, to the end that the issue may be more clearly defined. I think I may take it for granted that all intelligent spiritists who know anything about telepathy will admit that when a medium, acting under test conditions, states a fact that the sitter already knows, telepathy cannot be eliminated from the list of possible causes. Indeed, no scientific psychical researcher would for a moment consider the possibility of any other explanation. Why? Simply because he knows telepathy to be a *vera causa*, and he does not know anything about spirits. At least he is not certain about them; and most likely he is an adherent of the scientific axiom which Dr. Savage has given us, namely, — “we must not explain the unknown by something else that is still more unknown.” I have quoted Dr. Hodgson as an adherent to this principle; and F. W. H. Myers in his *Science and a Future Life* (see p. 32), tells us that, forgotten or unforgotten, active or latent, “whatever has gone into the mind may come out of the mind.” We may, therefore, safely assume that all are agreed that whatever the sitter knows must be presumed to be available to the medium. Nor will it be disputed that the sitter may obtain access to knowledge telepathically.

Now, if the exhaustive investigations of the Society for Psychical Research count for anything at all, it must be admitted that they have demonstrated two things in regard to telepathy, namely, (1) that telepathy is a power belonging exclusively to the subjective mind, or subliminal consciousness; and that, consequently, information may be received from, or imparted to, another subjective mind, without the knowledge or consent of the objective mind of either. The evidence for this in the Society's reports is overwhelming. (2) It is also in evidence that relatives, friends, and ac-

quaintances are always *en rapport*, and that they are always either actually or potentially in communication. Of 830 cases reported in *Phantasms of the Living*, only thirty-six were between strangers. But that number is sufficient to show that *rapport*, for telepathic purposes, is not exclusively confined to relatives or intimates.

We have, then, a basis of admitted facts and principles to start upon, namely, (1) that telepathy must be presumed whenever the sitter has prior knowledge of the fact communicated by the medium; (2) that subliminal knowledge may be acquired telepathically, unconsciously to the percipient. The only point likely to be in dispute, therefore, is as to whatever telepathically acquired knowledge can be conveyed telepathically to the psychic or medium. If it can, we have an easy telepathic solution of all the phenomena of which we have been speaking.

To put the case in concrete form, so that my meaning may not be misunderstood or distorted, let us apply the principle to one of Dr. Savage's test cases, namely, the communication supposed to be from his deceased son. All that is necessary is to suppose, (1) that Dr. Savage and his son were in telepathic *rapport* during the lifetime of the latter; and that (2) for some reason he desired to have his private papers taken care of by his father, his best friend, — his heart-to-heart confidant during all the years of his life. Thus far no one will dispute the assumptions. (3) Next we must suppose that the desire was conveyed from son to father by the only means available at the time, namely, by telepathy. No one who is conversant with the work of the Society for Psychical Research can doubt this for a moment. Of the 830 cases cited in *Phantasms of the Living*, a large proportion were cases showing that the dying

agents were endeavoring to acquaint their relatives or friends with some unsatisfied desire, or at least with the fact that they were *in extremis*. Indeed, it may be said that if the investigations of the Society for Psychical Research render anything approximately certain, it is that dying persons make an effort to inform their relatives and friends of their condition, especially if there is any special object to be gained by so doing. If, then, the friend or relative toward whom the effort is directed happens to be endowed with psychic powers, the effort is successful; and the information conveyed to the subliminal consciousness is thereby elevated to the supraliminal. On the other hand, if the friend is not a psychic the information remains latent in the subliminal, and may never rise above the threshold.

But, in such a case, if the person afterwards becomes subjective from any cause, there is likely to ensue an uprush of the contents of the subliminal, and he thus becomes conscious of the information that had been telepathically conveyed to him originally. This phenomenon has been designated by Myers as "deferred percipience," several instances, some of them experimental, being cited in *Phantasms of the Living*. (See pp. 56, 70-1, 201-2, 265, 325, and 519.)

These cases demonstrate that information telepathically conveyed, unconsciously to the percipient, reaches his subliminal consciousness nevertheless, and remains latent until an opportunity presents itself for elevating it above the threshold of normal consciousness. This may happen spontaneously, as when the percipient happens to attain the proper psychic conditions; or it may be brought about by the percipient coming in contact with a psychic who is endowed with telepathic powers, as in Dr. Savage's case.

This latter supposition, singularly enough, marks the parting of the ways. Why? I do not know why it should be denied that information telepathically received from one party can be telepathically conveyed to a third person, unless it is because the admission of the truth of the proposition would be equivalent to an abandonment of the spiritistic hypothesis, and an admission of the entire validity of the telepathic explanation.

Dr. Savage's case presents the issue in its simplest form. He will not deny that he was in telepathic *rapport* with his son. Nor will he deny that it was possible that the latter conveyed, telepathically, the information relating to his private papers to his father. But he will doubtless deny that it was possible for Mrs. Piper to obtain, telepathically, the content of that message from the mind in which it was lodged.

That would be "*télépathie à trois*," or telepathy by three; and the average spiritist becomes hysterical whenever that subject is broached. Why? Is it because he sees that, if it is once admitted that information telepathically received can be telepathically transmitted to a third person, the claims of spiritism must be abandoned in favor of the telepathic hypothesis? I can imagine no other adequate cause for either the emotional and insensate denial of the proposition or for the studied attempt to ignore it. Much less can I see any other cause for the assertion that the telepathic hypothesis requires the presupposition of omniscient intelligence on the part of the medium. Be that as it may, the fact remains that, if telepathy by three is a telepathic potential, it does afford a full and complete explanation of every case yet reported where the psychic was shown to possess supernormally acquired knowledge not ob-

jectively in the possession of any one present. It affords, for instance, an easy explanation of each of the twelve cases reported by Dr. Savage, as well as of all the cases cited by Professor Hyslop. It covers, in fact, every conceivable case of the kind.

It becomes important, therefore, to know whether telepathy by three is a telepathic potential. Fortunately for our present purposes, Dr. Clark Bell has quoted Mr. Lang on that subject, and he reports several cases of the kind. It is, in fact, a very common phenomenon, although little attention has been paid to it, for the reason that its scientific value as bearing upon the subject of spiritism has not been fully appreciated by scientists until quite recently. In the cases cited by Mr. Lang spirits were out of the question, for nobody was dead; and numerous instances might be cited in experimental telepathy by means of hypnotism or mesmerism, where all concerned were alive and well.

It is true that in some cases the source of the telepathic message may be difficult to trace, as in the one reported by Judge Dailey. But no particulars possessing the slightest evidential importance in his case have been verified. A *soi-disant* spirit comes to him and tells him that his name is John Taylor; that he was born in New Bedford; that he ran away when a boy and went to sea; that he had a very checkered career, which he described with great particularity; that everybody that he ever knew in New Bedford was dead; for he had not visited his native place for over sixty years. All this Judge Dailey thinks he has "verified," "to a certain extent," by going to New Bedford and finding that "Taylor was a very common family name" in that city (as it is in most other cities); that there were names on tomb-

stones that Taylor had mentioned; that there were streets there that he had named, etc., etc. But not one item was verified that tended to establish the personal identity of John Taylor, or to show that any one of his numerous stories was true.

Now, Judge Dailey tells us that he is "a lawyer, and claims to know something of legal principles." But he does not say that he is an expert in weighing the value of evidence. If he is, what would he say of the weight of a witness's testimony should he claim to have witnessed a murder, and, in the absence of the *corpus delicti*, seek to verify his statement by showing a street in the city where the tragedy was alleged to have occurred, and by naming somebody whose patronymic could be found on a tombstone in the city cemetery? I may appear to be straining a point in Judge Dailey's favor when I say that I still have enough confidence in his legal ability to believe that he would summarily dismiss the jury and throw the case out of court, if that was the only evidence in the case. And yet it exactly parallels the evidence by which he seeks to establish the personal identity of John Taylor, and verify the history of his life as given through the medium in the case. Well may the learned Judge ask me who telepathed the personal history of John Taylor to the medium. I confess that I do not know. But I do know that all the facts bearing upon the case which the Judge learned on his scientific pilgrimage to New Bedford, could easily have been learned from a local history of that city.

As I remarked, it is sometimes difficult to trace the telepathic connections so as to say just where the information conveyed to the medium originated. But they are generally just such cases as that upon which Judge Dailey pins his faith; that is to say, cases that cannot be either

verified or disproved. I confess that I am not sufficiently well versed in Judge Dailey's legal standard of evidential values to see clearly just how it is that an absence of facts tends to prove or to disprove anything in an inductive investigation. Nor can I quite appreciate the logic of that attitude of mind which impels a hysterical shout of triumph from every spiritistic throat whenever a medium tells a long and weird tale that can neither be disproved nor verified. To the mind of the average spiritist such cases are the most convincing, for they can then triumphantly ask, "How can telepathy account for this?" To which the obvious answer is that telepathy is not called upon to account for unverified statements.

This class of cases, however, is not the one that presents the real difficulties that may sometimes occur, although they are very rare. Let us suppose an extreme case: Suppose a *soi-disant* spirit presents himself at a séance and announces himself as a stranger to all present; and then proceeds to relate facts entirely unknown to those present. Then suppose that those facts should be afterwards fully verified. Obviously, in such a case, it would be difficult to trace the telepathic connection. But would anybody but a spiritist imagine that the telepathic hypothesis had been disproved by an occasional failure to find the facts in such a case? I think not. And yet these are the cases upon which spiritists rely to establish their own theories and to "disprove" the telepathic hypothesis. In other words, it is the essence of the logic of spiritism to rely chiefly upon the absence of facts when conducting an inductive investigation. Is Judge Dailey's legal education responsible for this principle of his logic? If so, he would hang a man for murder simply for the want of evidence to establish either his guilt or his innocence.

Logically, the case stands thus: (1) There are sporadic cases where it is difficult to determine from what source a telepathic communication originated.

(2) On the other hand, there are innumerable cases where the telepathic connection is obvious, as in all Professor Hyslop's cases, in all Dr. Savage's cases, and in most of those cited by Judge Dailey.

(3) In all cases where the facts are known, "telepathy by three" affords a complete telepathic explanation.

I submit that those few cases in which the facts are not known should not be allowed to weigh one hair against the great mass of cases where the telepathic connection is obvious; especially since the latter can all be explained on the telepathic hypothesis, — assuming, of course, that "telepathy by three" is a telepathic potential.

I re-submit my original proposition: If A can, by any known means of communication, convey a message to B, B can convey the same message by the same means to C, other things, of course, being equal.

If not, why not?

I have repeatedly submitted this proposition to spiritists, and as repeatedly asked the same question. If it is not true there must be a valid answer to the proposition; but that answer has never been attempted otherwise than by the bare assertion, without argument, that "it is carrying telepathy too far." On the other hand, if the proposition is true, spiritism, considered as a scientific proposition, is disposed of. Nor can this question be successfully evaded by an attempt to ignore it, nor by substituting for argument such assertions as that the telepathic theory requires the presupposition of omniscience on the part of the psychic.

VI

HOW I BECAME CONVINCED OF THE EXISTENCE OF THE FACULTY OF TELEPATHY

I HAVE been asked to tell how I became convinced that man possesses the power to communicate thoughts to his fellow-man otherwise than through the recognized channels of the senses. I could answer that question very easily and truthfully by saying that I am credulous enough to accept and believe human testimony. When thousands of reputable men and women declare that they have experienced the phenomenon and witnessed it in others; and when hundreds of men, whose reputation for probity and scientific attainments is international, aver that they have experimentally reproduced the phenomena of telepathy, I confess that I am very much inclined to believe what they say. When a great society, the London Society for Psychical Research, is organized for the sole purpose of investigating such phenomena, and I find that its active workers comprise some of the ablest scientists and most careful and conscientious investigators in the civilized world, and when that society publishes two large volumes, *Phantasms of the Living*, containing more than thirteen hundred pages of testimony to the fact that telepathy exists as a power of the human mind, I admit that I am prone to be convinced of the truth of tel-

epathy. I know that it is unscientific, very, to be so credulous; for I have been so informed by some very able scientists. I know that it is considered to be scientific heresy to believe human testimony on such subjects; and I have been informed by members of the Society for Psychical Research that I have been guilty of such heresy in that I have believed the testimony of that society, and have generalized from its published facts, instead of spending a lifetime in finding out whether they told the truth, or were engaged in a gigantic conspiracy to impose upon the credulity of mankind.

I do not mention this in any spirit of complaint or fault-finding, for I cannot but realize that in times past it was unsafe for any investigator of psychic phenomena to accept the testimony of men on that subject. The tales of devils, demons, ghosts, hobgoblins, witches, visions, dreams, and presentiments, with which old women and nurses were in the habit of entertaining the good children, and securing the obedience of the refractory, were fair samples of the material with which, at the threshold of scientific inquiry on the subject, the investigator of psychic manifestations had to deal; and it is obvious that, under those circumstances, the old rule that human testimony should not be received was indispensable.

But when such world-renowned scientists as Professors Crookes, Wallace, James, Coues, Gates, Sidgwick, Myers, Podmore, Hodgson, and hosts of others of equal capacity for accurate observation — when such men declare that they have experimentally demonstrated the existence of that and cognate psychic powers, I am forced to the conviction that the old rule may now be somewhat relaxed. That is a question, however, which

each investigator must determine for himself; and I am not disposed to find fault with any one who chooses to adhere to the old rule and to waste years in reproducing phenomena which have been witnessed and verified by thousands of accurate and conscientious observers. But I do say, nevertheless, that as long as every student of experimental psychology adheres to the notion that in order to be considered "scientific" he must personally conduct every experiment from which he deduces a conclusion, there will be little progress made in psychic science. If the investigation of the physical sciences had been subject to that principle, we should still have been riding in stage-coaches, and nine-tenths of all the appliances of modern civilization would have been yet unknown. If the science of electricity, for instance, had been so studied, Edison would have commenced his studies by fumbling with lodestones, producing static electricity by rubbing sticks of sealing-wax upon the seat of his pants, and possibly by this time he might have reached the kite-flying experiment of Franklin. Certain it is that he would have reached the stage of senile decrepitude before he could have experimentally verified a one-hundredth part of the conclusions of his predecessors, and he would have died of old age and disappointed ambition before he would have dared to make an original experiment or generalization.

If substantial progress in psychology is ever to be made, it must be by adopting the same methods which prevail in the development of the physical sciences. That is to say, some credit must be attached to the declarations of competent observers. We must take something for granted. We must begin where our

predecessors left off. We must take advantage of their discoveries and explore new domains, instead of perpetually travelling in their old pathways for fear that they may have been lying to us about the topography of the realms they have explored.

I must be understood now as giving fatherly advice to those who are just entering the field of psychic research. I confess that I did not dare to follow the advice I am giving, for the simple reason that I began before psychic phenomena had been scientifically investigated by competent observers who were known to be trustworthy. I did not, however, waste much time in repeating experiments after becoming satisfied of the verity of any particular class of phenomena; for I investigated for the sole purpose of satisfying my own mind, and not with a view of converting others. I investigated by classes of phenomena, and, having demonstrated to my own satisfaction that one particular class of phenomena could be produced without fraud or legerdemain, I dropped it and proceeded to another class, and so on, until the whole psychic repertory had been practically covered.

I may be pardoned by some of my readers for remarking, in passing, that when I began my investigations I had no theory of causation or hypothesis to sustain. I simply desired to know the truth as to the verity of the alleged phenomena; and if I know my own mind I was free from prejudice for or against any then existing hypothesis. I may remark, however, that, like every other honest investigator, I was hoping to be able to formulate a working hypothesis which would account for all the facts; and I early became conscious, in a vague, general way, that the phenomenon of telepathy,

if it could be proven to exist, must be a factor of supreme importance in any theory of causation that could be formulated. To those who are acquainted with my subsequent writings it is superfluous to say that I found my conjectures to be correct, and that telepathy actually marks the border line between the realms of science and superstition.

I therefore applied myself to the task of investigating that phenomenon, with a firm determination to know the fact of the existence of that power if it existed. To my surprise and gratification I found the task to be a comparatively easy one when I came to know something of the conditions necessary to be observed.

I have not space to devote to the recital of the many failures which I encountered, nor of the partial successes which might be relegated to the domain of coincidence, nor of the complete successes where the element of human veracity constituted a factor. I will, therefore, state briefly, not how I became convinced, but how I came to *know* of the existence of the faculty of telepathy.

The first conclusive test obtained was through the instrumentality of a lady whose husband is a professional hypnotist, — Professor Carpenter of Boston. Professor Carpenter is a careful, conscientious operator, and had trained his wife's psychic powers to a high state of proficiency. I had frequently seen exhibitions of her powers at private entertainments before I obtained her consent to give me an opportunity to conduct the experiments myself in the absence of her friends. I invited two eminent scientists of the ultra skeptical variety to be present and assist.

Having partially hypnotized the lady, I procured from a store near by a pack of common playing-cards. One

of the gentlemen present opened the pack, thoroughly shuffled the cards, and handed them to me. Previously to this, however, I had thoroughly blindfolded the lady by folding a pair of kid gloves into pads of convenient size, placed them over her eyes, and drawn a folded silk handkerchief over the pads and around her head, tying it tightly and securely in place. Each of the gentlemen present carefully examined the condition of the pads and handkerchief, and each declared himself perfectly satisfied that it was utterly impossible for her to see either through or under the dozen or more thicknesses of material with which her eyes were bound. It was, in fact, a physical impossibility for her to open her eyes. Enjoining strict silence on the part of all present, I then shuffled the cards without looking at them, and standing partly behind her chair, so as to be out of the range of her vision even if she had not been blindfolded, I drew a card from near the centre of the pack, and after having exhibited it to the gentlemen present, placed it in her hand. She immediately pressed it against her forehead and at once correctly named the card. I then handed her a dozen others in rapid succession, and she made not a single mistake. One of the others then took the pack and repeated the test until he was satisfied that there was no collusion discoverable, at least, between the lady and myself. Half the pack had then been exhausted, and so was the lady by that time, and the séance was closed.

After this I had many séances with her, sometimes with only one or two assistants, and sometimes in the presence of a large party. But I do not remember more than one or two failures, and these occurred after she had become weary.

I should remark, in this connection, that when I first began my experiments with her, she was credited with possessing "clairvoyant" powers. That is to say, no distinction had then been clearly drawn between clairvoyance and telepathy; and every phenomenon involving the perception of a fact not cognizable by the senses was called "clairvoyance." I soon discovered, however, that there was a clearly marked distinction between clairvoyance, that is, independent clairvoyance, and telepathy. In conversation with Professor Carpenter I learned that his wife sometimes made a mistake in describing the first card or picture handed to her, and that upon receiving a second card or picture, she would accurately describe the first; and on receiving the third, she would correctly name the second, and so on through a long series. Having witnessed several such performances, I discovered that when she made a mistake it was when no one had seen the card previously to its having been handed to her. I also noted that she would sometimes place the face of the card against her forehead, no one having seen it, and would fail to recognize its character; and then she would turn the card over, the back to her head and the face to the audience, and immediately name it with accuracy. I then made a series of tests with this lady and other persons, and found that in no case could the card be correctly designated when no one in the audience had seen it. If I was alone with the percipient, and handed him or her a card without looking at it, the experiment always resulted in failure; whereas the same percipient would instantly give the correct answer when she could read it in my mind.

It was thus that I learned to doubt the existence of the faculty of clairvoyance, properly so called; and after

the lapse of many years of patient observation, I have still to witness the first phenomenon that will have a tendency to convince me of the existence of the power of independent clairvoyance. I do not say that it does not exist. I do not know. But I do say that I have seen nothing that cannot be referred to telepathy for a full and complete explanation.

Having concluded the series of experiments above mentioned, I determined, if possible, to develop the faculty in my own mind, at least far enough to resolve any lingering doubt that might be unconsciously entertained. Accordingly, I caused myself to be securely blindfolded in presence of my family and two or three trustworthy friends, and instructed them to draw a card from the pack, place it upon a table, face up, and in full view of all but myself. I enjoined absolute silence, and requested them to gaze steadily upon the card and patiently await results. I determined not to yield to any mere mental impression, but to watch for a vision of the card itself. I endeavored to become as passive as possible, and to shut out all objective thoughts. In fact, I tried to go to sleep. I soon found that the moment I approached a state of somnolency I began to see visions of self-illuminated objects floating in the darkness before me. If, however, one seemed to be taking definite shape it would instantly rouse me, and the vision would vanish. At length I mastered my curiosity sufficiently to enable me to hold the vision long enough to perceive its import. When that was accomplished, I saw — not a card with its spots clearly defined, but a number of objects arranged in rows and resembling real diamonds. I was finally able to count them, and finding that there were ten, I ventured to name the ten of diamonds. The

applause which followed told me that I was right, and I removed the bandage and found the ten of diamonds lying on the table. The vision was symbolical, merely, but no other possible symbol could have conveyed a clearer idea of the fact as it existed.

I then suffered myself to be blindfolded again, and in a very few moments saw a vision of a single heart spot floating before me. I named the ace of hearts, and was right. Another card selected was the five of spades, but I named the five of clubs. The mistake arose from my own obtuseness in not being able to interpret the element of symbolism in the vision. I saw five spots arranged as on a card, but could see only the stem end of each spot, the other end being thrust into the darkness, so to speak, leaving a little less than half of each spot visible. Now, the stem end of the club spot is precisely the same as the corresponding end of the spade spot; and I was stupid enough not to be able to see that the fact that the point of each spot was concealed was obviously a symbolical representation of spades thrust partly into the earth. This was the only mistake that I made out of five cards selected for my individual benefit. Others of the company tried the same experiment in the same way, and each one scored a sufficient number of successes to demonstrate the fact of telepathy.

Since that time I have seen hundreds of experiments tried, neither more nor less wonderful and conclusive than those I have mentioned. I will relate one more, merely because it is a little outside of the beaten track of experimental telepathy, although the principle involved is exemplified in thousands of instances where it is not generally recognized. Those of my readers who are familiar with my published works will understand

the full significance of the remark when I say that I have held, and still hold, that telepathy between relatives and friends is constant; and that a telepathic message can be conveyed from one to another through an indefinite number of persons, just as an oral communication can be transmitted from mouth to mouth, until the origin of the message is lost sight of. Telepathy, be it remembered, is the means of communication between subjective minds, and hence the content of a telepathic message is rarely elevated above the threshold of normal consciousness. That happens only when the percipient is a psychic, or is temporarily in a partially subjective state or condition. Hence it is that a telepathic message may be conveyed from the subjective mind of A to the subjective mind of B, and from B to C, and so on, unconsciously to all concerned, until some one of the number comes in contact with a psychic — a mind reader — when the message will for the first time rise above the threshold of the normal consciousness of the latter, and thus become known to all concerned. In other words, to reduce the proposition to its lowest terms: If A can communicate a telepathic message to B, it follows that B can communicate the same message telepathically to C, and by the same means C can communicate it to D, and so on indefinitely. It was to confirm this proposition that I made the experiment which I am about to relate, although its truth is all but self-evident.

Two or three years ago a travelling telepathist visited Washington, and gave a series of public exhibitions of her powers. I did not attend the performances until after the experiment, and I had never seen or heard of the company before their visit to Washington. A friend of mine, a leading lawyer in the city, attended the first

performance, and came to me the next morning full of wonder and astonishment, and requested me to go with him the next night. I refused, but proposed a test which would eliminate all possibility of trickery, legerdemain, or collusion. I learned from him that the husband of the telepathist hypnotized and blindfolded her, placed her upon the stage, and then distributed tablets among the audience, requesting them to write questions and sign their names, and then fold the slips of paper, place them in their pockets, and await results. This having been done, the lady called the name of each one in turn, stated the question asked, and answered it. The husband then asked for the slip containing the question and read it to the audience; and in each case the telepathist was found to be right as to the name and the contents of the message. Of course, all this might be accounted for on the supposition that the lady was in collusion with the writers of the messages, or that the tablets bore the impression of the writing and a confederate had some means of conveying the information to her. To remove all such possibilities, I requested my friend to attend the next performance and write, on a leaf of his own notebook, the following:

“A friend of mine has given me the name of a playing-card. Please tell me what it is.” (Signed.)

I then said to him: “I am now going to give you the name of the card by means of telepathy only. I will not state its name to you or to any one else, by any objective means whatever, until you obtain the lady’s answer.”

My instructions were followed to the letter, with this result: The telepathist called the name of my friend

and stated the question correctly, and then said: "I cannot see the card clearly, but it is red. I feel sure that it is a diamond," or words to that effect. She tried faithfully to ascertain the exact denomination, and finally her husband explained that she was very tired and in that state could not see clearly. He then promised to hypnotize her again when she was rested, and to send the answer by mail. He kept his promise and stated in his letter that his wife still had some difficulty in seeing the card clearly, but was under the impression that it was the nine of diamonds.

When the letter was received and before it was opened, I divulged to my friend the name of the card of which I had thought. It was the ten of diamonds.

I have little to add to the above recital. It is obvious, however, that the evidential value of the lady's answer is fully as great as if she had said that it was the ten of diamonds instead of the nine. When one cannot see a card quite clearly enough (either objectively or subjectively), to distinguish between the nine and the ten spot, the evidential value of the answer is manifestly of the highest order if either one of the two is named.

In conclusion, I desire to say that telepathy is, all things considered, the most important factor in psychic science; for it affords a full and complete explanation of the great bulk of all that is mysterious in psychic phenomena. It is not too much to say that if this factor should ever be eliminated from experimental psychology, the observable phenomena which have puzzled the brains of mankind from time immemorial will again be relegated to the domain of doubt and superstition.

VII

THE RATIONALE OF HYPNOTISM

SINCE the time when Mesmer first brought his discoveries to the attention of the scientific world, the students of the phenomena which he evoked have been hopelessly at variance with each other. That diverse theories of causation should be entertained regarding phenomena so strange and full of mystery is inevitable; but it is rare that scientists disagree concerning the demonstrable facts of a subject under investigation. That of mesmerism, however, seems to form an exception to the general rule. After more than a century of research, the students of that subject are still divided into schools which wage war upon each other's theories and dispute each other's facts. The most carefully conducted experiments of one school are followed by opposite results when repeated by another. Experiments innumerable have been made and recorded with conscientious care and scientific accuracy by members of all the schools. Many facts have thus accumulated and a few important principles have been discovered. In this sense some progress has been made. But in the larger sense, — in the sense of being able to appreciate these facts and to understand the significance of these discoveries, progress, until very recent years, has been slow.

It is self-evident that no fact in nature is inconsistent with any other fact. It follows that there must be some

underlying principle, or principles, heretofore overlooked, which will harmonize the facts of mesmerism. It is the purpose of this paper to invite attention to a few such principles.

In doing so it will first be necessary to review briefly the salient points in the modern history of the subject, beginning at the time when Mesmer appeared in Paris and threw that capital into a state of wild excitement over the marvellous effects of his manipulations.

The principal use to which Mesmer applied his power was that of curing disease. This, of course, called forth the anathemas of the medical profession; but the people flocked to his rooms and many wonderful cures were effected. His methods were unlike any practised now. He surrounded himself with mysticism. He seated his patients in dimly lighted rooms pervaded by sweet odors and mysterious music. In the midst was a caldron in which simmered various chemical ingredients. Joined together by cords, or holding each other's hands, his patients sat in silent expectancy. Then Mesmer would enter, dressed in the garb of a magician, and glide softly among the throng, touching one, making passes over another, and bestowing a look upon a third. The effects were as violent as his methods were mysterious. Ladies would faint or go into hysterics, and strong men would be seized by convulsions. All such symptoms were considered salutary, however, and they were frequently followed by wonderful cures.

His theory was that a certain magnetic fluid pervaded the universe, but was most active and potent in the human nervous organization, and enabled one person, charged with the fluid, to exert a powerful influence over another. This he termed animal magnetism. The

scientists of the day attacked the theory and ignored the importance of the phenomena. The Academy of Sciences investigated the subject through a commission. The report of the commission admitted the leading facts claimed by Mesmer, but held that his theory was untenable. They admitted the existence of a force capable of controlling man's physical organization; that this force is amenable to control, and that this control can be reduced to an art. The name they gave to the force was "Imagination"; and the conclusion they arrived at was that the subject was not worthy of further scientific investigation.

It is difficult at this day to conceive the process of reasoning by which that learned body could have arrived at such a conclusion. They had in reality made a very important discovery, — the most important which science has contributed toward a solution of the great problem. They were the first to discover that the phenomena of mesmerism are purely subjective. That they should content themselves with the glory of having disproved Mesmer's theory of causation, and after having themselves made the discovery of the true theory, should announce that their own discovery was not worth the trouble of scientific investigation, is inexplicable. It seems probable that they were deceived by their own loose nomenclature. That word "imagination" is still used by the average physician to cast discredit upon the so-called mind-cure and all cognate phenomena. He demonstrates the fact that, by exciting the imagination of a patient, bread pills will cause purging, and colored water will have the effect of an emetic; but he ignores or derides the inference from his own demonstration, that this same "imagination" is capable of exercising a curative effect upon the body.

Soon after the promulgation of the learned report of the Academy, Mesmer was driven into exile, followed by the execrations of a majority of the medical profession. He left many disciples, however, among whom were a few able scientists, such as the Marquis de Puységur, Deleuze, and others, who pursued the investigation. These gentlemen revolutionized the art of inducing the mesmeric state and made many valuable and startling discoveries. Instead of the mysticism and violent methods which Mesmer employed, they would gaze into the patient's eyes, make gentle passes over his head, face, and body, and thus induce a profound sleep. In this state the patients were oftentimes cured of disease, anæsthesia was produced, and surgical operations were performed without pain. The therapeutic value of the power was thus fairly established. They also discovered that their patients could be made apparently to see without the use of the natural organs of vision. They could be made to read when perfectly blindfolded, and they could be caused to obey mental orders. These facts were attested by so many men of learning and probity that the French Royal Academy of Medicine felt compelled to order a new investigation. A committee was appointed, composed of some of the ablest and most cautious scientists in that institution. For nearly six years that committee pursued its investigation with the utmost care and circumspection. Its report admitted the therapeutic value of the process and declared that the power of thought-transference and clairvoyance had been demonstrated by indubitable tests. The advocates of mesmerism had scored a triumph. Its opponents were simply exasperated. The Academy refused to print the report and ordered a new investigation. Another com-

mittee was appointed, headed by one who had openly sworn eternal hostility to the doctrine. The result was inevitable. After the examination of two subjects, they made their report. It embraced two points equally conclusive. One announced their failure to witness the occult phenomena, and the other impugned the intelligence of the former committee. It is, perhaps, unnecessary to say that this report was accepted by the average scientist of the day as embracing the whole gospel of mesmerism.

For some years subsequent to this, the investigation of the subject was confined to its psychological and therapeutic features; but every scientist who dabbled in it was tabooed by the majority of his associates. Many able works were written on the subject, but none of them attracted the attention of the Academicians until Dr. Braid, of Manchester, undertook to demonstrate the theory that the hypothetical magnetic fluid had nothing to do with the production of the phenomena.

Braid made two important discoveries. The first was that by placing a bright object before the eyes of the subject, and causing him to gaze upon it with persistent attention, he could be thrown into the mesmeric sleep, during which many of the well-known phenomena ascribed to magnetism could be produced. The fact that this could be done independently of personal contact with another, or of his personal influence, seemed to disprove the magnetic theory and to indicate that the subject matter was susceptible of a physiological explanation.

His second discovery was that the sleep could be induced by his method independently of suggestion. The significance of this discovery has never been appreciated by any of the schools. Indeed, Braid himself seems to have attached to it no special importance. It is, how-

ever, of transcendent interest, as I shall attempt to show hereinafter.

To the first of these discoveries more than its due share of importance was given; but it opened the door for the admission of mesmerism within the domain of inductive science. It mollified the Academicians, for it seemed to disprove the magnetic theory, and it promised a physiological explanation. The method was simple and easily applied. Better still, no one claimed to be able to produce the phenomena of thought-transference or clairvoyance by that method. Best of all, it had been given a new name.

Many new names had been bestowed upon it by different writers, but with the exception of "mesmerism," each implied a theory of causation. "Mesmerism" was obviously improper because Mesmer was neither the discoverer of the force nor the inventor of the practical method of evoking it. Besides, his name was a stench in the nostrils of the medical profession for the reason that he had threatened them with a universal remedy for disease. So when Braid denominated it "Hypnotism," from the Greek word signifying sleep, it was hailed as a compromise sufficiently non-committal to entitle it to recognition.

Braid is entitled to great credit for his original researches and discoveries; but the fact remains that he has been the indirect means of retarding true progress in psychology. It is a remarkable fact that since his method of hypnotizing has been generally adopted, the higher phenomena,—thought-transference and so-called clairvoyance,—have fallen into disrepute. Indeed, the production of such phenomena has been, until recent years, practically a lost art. The cause of this will re-

ceive attention in the proper place. Beyond the two discoveries above noted, his work is practically valueless for the reason that he never understood the subtle rôle which suggestion plays in all hypnotic phenomena.

For some years after the appearance of Braid's work there was but little progress made in the study of hypnotism. His methods were, however, generally adopted. The value of his discoveries was not appreciated by his own countrymen, and it was not until the Continental scientists extended his researches that he obtained recognition. Liébault was the first to confirm his theories, and he became the founder of what is known as the Nancy school of hypnotism.

The theory of that school is that the different physical conditions characterizing the hypnotic state are determined by mental action alone; that this mental action and the consequent physical and psychological phenomena are the result, in all cases, of suggestion in some form; that the phenomena can be produced in healthy as well as in diseased organisms, and that the explanation of the phenomena must be found by a study of their psychological features.

The Paris school, or school of the Salpêtrière, on the other hand, holds that hypnotism is the result of a diseased condition of the nerves, — a neurosis; that suggestion plays but a secondary rôle in the production of the phenomena, a great proportion of which can be produced without any form of suggestion; that the true hypnotic condition is only found in persons whose nerves are diseased, and that the whole problem is explainable on the basis of cerebral anatomy or physiology.

I have now briefly noted a few of the salient features of the history of hypnotism and the theories of its lead-

ing schools since the time of Mesmer, purposely leaving out that large class of amiable people who believe that the hypnotic subject treads the border land between this world and the next. It now remains to outline a few fundamental principles which, though lying on the surface, seem to have been overlooked in the microscopic search for the ultimate cause of the phenomena. I will then attempt to point out a few sources of error which beset the pathway of the investigator and cause the facts of hypnotism to seem to contradict one another.

It may be said, briefly, that hypnotism is correctly defined as an induced quiescence of the objective faculties, followed by increased activity of the subjective faculties. It is common for writers on this subject to divide the hypnotic state into grades. Thus the Nancy school gives us six, and the Paris school three grades. I will not attempt any classification of grades, for the simple reason that there are none beyond what may be embraced in the terms partial and complete hypnosis. There are various conditions, it is true, which are clearly defined: such as lethargy, catalepsy, and anæsthesia; but each is a condition which may be induced at the will of the operator, at any stage, by simple suggestion. The grades of hypnosis, if such a term may be employed, are innumerable and shade into each other by imperceptible degrees, ranging from the state in which the objective and subjective faculties act synchronously, up to the condition of lucid somnambulism.

The synchronous action of the objective and subjective faculties is the result of partial abeyance of the action of the former. It is a phase of hypnotism which has never received the slightest attention at the hands of students of the subject, although it is not an uncom-

mon phenomenon and is of immense practical importance. It may be defined as a condition of subjective mental activity controlled by auto-suggestion. This state is generally self-induced, and it may be said to be the natural mental condition of a favored few. It may, however, be induced by the hypnotic processes. It is a condition of partial hypnosis in either case. The subject is just sufficiently hypnotized to rouse the subjective faculties to action without decreasing the power and activity of the objective faculties. The two minds then operate synchronously. All the best qualities of both are in a state of intense and harmonious activity, the reasoning powers of the objective mind being reinforced by the prodigious memory of the subjective mind. This phenomenon is occasionally illustrated in so-called trance speakers. It may generally be recognized by the fact that in this condition they speak with their eyes open, — literally as well as figuratively, — but the character of their reasoning process is a sure criterion. It is most strikingly illustrated in men of genius. It is the source of the wonderful power over their fellows possessed by such men as Patrick Henry, Clay, Webster, and all that class of men known as "magnetic speakers." It is the "inspiration" of the great artist, who paints well only when the "mood" seizes him. It is the "fine frenzy" of the poet, whose pen —

"As imagination bodies forth
The form of things unknown, . . .
Turns them to shapes, and gives to airy nothing
A local habitation and a name."

It is the grand secret of the power which certain men have over the brute creation. It is the partially hypnotic condition often unconsciously self-induced, which en-

ables men to enter a den of tigers, which gave Rarey his power over wild horses, protected Daniel in the lions' den, enables the adepts of India to sleep unarmed and unharmed in the tiger-infested jungles, and gives the snake-charmer the power to control and render harmless the most venomous of reptiles.

Closely allied to this branch of the subject is that of auto-suggestion. This has been dimly recognized as a possible factor in hypnotism, but its importance seems never to have been fully understood, nor has the doctrine been formulated. It may be defined as the control which the objective mind of an individual exercises over his own subjective mind. This control is as absolute in certain conditions as is that of the hypnotist over his subject. Many can produce local anæsthesia in their own persons by auto-suggestion without the aid of even partial hypnosis; but those who have been in the habit of being hypnotized can, by this means, produce wonderful curative effects upon themselves. The principle runs through all hypnotic phenomena, and is at all times liable to affect the results of experiments if the possibilities of auto-suggestion are not intelligently eliminated.

It now remains to point out some of the causes which have conspired to produce conflicting results in various lines of experiment. The question will first be considered why it is that hypnotists of the present day rarely produce the phenomenon of thought-transference.

The first proposition to which attention is invited is that when two or more persons are in the hypnotic state, and are *en rapport* with each other, there is an inter-communion of thought independent of objective means of communication. Owing to the nature of ordinary experiments and the methods now employed, it is comparatively seldom that this is demonstrated. I have

however, observed it with sufficient frequency to be assured of the fact; and Professor Carpenter, of Boston, who is one of the most careful and successful hypnotists of this country, tells me that he has frequently witnessed phenomena which can be accounted for on no other rational hypothesis. The early hypnotists demonstrated it beyond question in a thousand different ways. My limit of space, however, permits only a statement of the fact.

It follows from this proposition that if the hypnotist is himself partially hypnotized and his subject is completely subjective, the best conditions are established for enabling the one to control the other by silent volition. I undertake to say that this condition necessarily resulted from the early methods of producing hypnosis.

It will be remembered that Braid demonstrated two propositions: 1. That hypnosis could be induced by causing the subject to gaze intently upon an object. 2. That suggestion was not essential to the production of this result. It will be further remembered that the old method of hypnotizing was by steady and persistent gazing into the eyes of the subject, accompanied by gentle passes and intense concentration of mind. The inference is irresistible that by this gazing into the eyes of the subject the operator partially hypnotized himself at the same time that he was hypnotizing his subject. If Braid's experiments prove anything they demonstrate the correctness of this conclusion.

How this power was lost is obvious. The moment Braid proved that a subject could be hypnotized by the easy, simple, and sure process of causing him to gaze upon an inanimate object, every one discarded the old process as a relic of the past, too cumbersome and laborious to be of further use. It was much easier to let the subject do all the gazing, and no one had the slightest

idea of the effect which the old method produced upon the operator.

Curiously enough, the very next important discovery conspired with the other to produce the same result. It was soon after Braid's time that the potency of suggestion as a factor in hypnotism began to be realized. It was discovered that sensitive subjects could be hypnotized by suggestion alone, independently of either the theoretical magnetism or Braid's-shining object. This was even easier than Braid's method. It required no gazing by either party. All that was required was the confidence of the subject, and this could be acquired by any mysterious manipulation that would appeal to his imagination. It was inevitable that this method would be as barren of results as the other in the production of the higher phenomena.

Thus it happened that the two great modern discoveries, each of the most transcendent importance, conspired to retard the progress of the research in its higher branches, and caused a retrograde movement which has now lasted half a century.

Contemporaneously with the height of the excitement on the subject of hypnotism, the phenomena of spiritism arrested public attention. It found the country well supplied with material for "mediums." Every hamlet had been visited by lecturers on hypnotism, and every hypnotic subject was a ready-made medium. The fact was readily recognized that there was something in common between the two classes of phenomena; and the skeptics of the day sought to explain the wonderful character of the "communications" by referring them to clairvoyance. But spiritists seized upon clairvoyance, made it their own, and proceeded to explore the domain of Heaven. The result was that the skeptic retired in dis-

gust and has ever since refused to believe in clairvoyance. Thus prejudice conspired with the other causes named to retard the progress of the study of hypnotism.

In the meantime the followers of Braid on the one hand, and advocates of the theory of suggestion on the other, still persist in misunderstanding the facts which separate them into hostile schools. The former hold that because the sleep can be induced without the aid of suggestion, it follows that suggestion is not a necessary factor in the production of the subsequent phenomena. The latter hold that suggestion is a necessary factor in the production of all phenomena subsequent to sleep, and it follows that suggestion is a necessary factor in the production of the sleep. The truth will be found as usual, on the median line. The sleep can be induced by Braid's method either with or without the aid of suggestion, and by suggestion either with or without Braid's method; but suggestion is a necessary factor in the production of all subsequent phenomena. When the sleep is induced by suggestion alone its cause is a mental impression. When it is induced by Braid's method without suggestion, it is caused by "exhausting the nervous centres in the eyes and their appendages,"—in short, by physical weariness. Both will be recognized as potent factors in the production of ordinary sleep.

The physiological explanation of Braid's method of inducing hypnosis was regarded by many as an evidence that all the phenomena were susceptible of explanation on the basis of physiology. The Paris school, of which Professor Charcot is the acknowledged leader, hold this theory. I will attempt to point out a few of the sources of error which render the experiments of that school of doubtful value.

The first and most prominent of these consists in the

assumption that hypnotism is a nervous disease, and that it is found in its most pronounced form in hysterical women. Hence, their experiments are confined to that class of subjects. The absurdity of this assumption will be apparent when it is known that the best subjects are perfectly healthy persons. At least that is the testimony of every experimenter outside of the Salpêtrière.

Another source of error lies in the fact that they ignore suggestion as a necessary factor in hypnotism, and hold that many of the phenomena can be produced without its aid. The effects which they produce in this way are purely physical, such as causing any muscle of the body to contract by pressing upon the corresponding nerve, and releasing the tension by exciting the antagonistic muscle. The condition necessary for the production of this phenomenon is called by Charcot "neuro-muscular hyperexcitability." In a recent work by MM. Binet and Féré, pupils of Charcot, a chapter is devoted to this subject. They detail with scientific exactitude many curious results of their experiments in this line; and then add, with charming ingenuousness, that precisely the same effects can be produced in many hysterical patients in their waking state.

After such an admission it seems superfluous to remark that this class of experiments proves nothing which can be said to be characteristic of hypnotism; and the Nancy school wastes its time in taking the trouble to demonstrate that the symptoms cannot be reproduced in healthy persons without the aid of suggestion.

Another serious error into which the Charcot school has fallen consists in the assumption that subjects in the lethargic state know nothing of what is happening around them. No greater mistake is possible. There is no such thing as subjective unconsciousness. The ob-

jective mind sleeps, — the subjective, never. No matter how profound the lethargy which locks the objective senses, the subjective faculties are ever alert, and comprehend, with preternatural acuteness, every word uttered. This is a primary fact in hypnotism, ignorance of which has caused a deal of trouble and needless alarm to many an experimenter. It is safe to say that nine-tenths of all the difficulty experienced in managing hypnotic subjects, especially in awakening them from profound lethargy, arises from ignorance of this law. It is obvious that experiments made without a knowledge of it are valueless when made with the view of eliminating suggestion as a factor in hypnotism.

Another source of error consists in the fact that they disregard the possibility that their subjects may read the thoughts of those *en rapport* with them. But, leaving this out of consideration, it goes without saying that little credit can be accorded to a series of experiments conducted in disregard of any one of the primary principles governing the subject matter.

Again, MM. Binet and Féré imagine that they have demonstrated the peripheral character of the phenomena by various experiments pertaining to visual hallucinations. For instance, they observe that if a subject is caused to see an imaginary object through a prism, the image will be doubled precisely as if the object were real. The Nancy school undertakes to disparage the verity of this experiment by showing that the result will not follow if it is tried in a dimly lighted room. This answer at best seems very inconclusive. I am inclined to accord full credit to the experiment for the reason that it seems but an additional evidence of the power which the mind exerts over the functions and sensations of the body.

A word concerning so-called tests of mind-reading

and kindred phenomena. It is proverbial that tests of such phenomena, made at the instance of a pronounced skeptic, generally fail. A striking instance was that of a noted mind-reader in London, a few years ago. He was giving, in public and in private, indubitable evidence of his power to read writing or print in a sealed envelope. In the height of a successful career he was confronted by a prominent British statesman who placed a bank note for a large sum in an envelope, and offered it to the mind-reader if he would read the number correctly. Repeated trials resulted in dismal failure. A similar offer was made through a skeptical committee of the Royal Academy of Medicine many years ago, and the failure was complete. The literature of skepticism is full of such instances of failure by subjects who had often performed the same feats in presence of persons of undoubted probity and intelligence. These facts have given rise to the opinion which prevails very generally among scientists, that those who have witnessed successful experiments of this kind are deficient in intelligence or integrity, and that these attributes of mind and qualities of character are confined to those who have not witnessed them.

The explanation of these failures will be obvious to any one who will stop to consider the power of suggestion over the subjective mind. The presence of an avowed skeptic who aggressively declares his disbelief operates as an all-powerful suggestion that the experiment is destined to fail. Every dollar staked adds emphasis and potency to the suggestion. Failure under such circumstances is a necessary consequence, and could only be avoided by a suspension of the first law of subjective mental action. Hence, the "harmonious conditions" so constantly insisted upon by spiritists as a

necessary prerequisite to the successful production of their peculiar phenomena, will be seen to possess a scientific value and importance.

The therapeutic value of hypnotism has long been known and acknowledged, especially in the cure of nervous and functional diseases, the morphine habit, chronic alcoholism, etc. Its reputation has suffered much at the hands of ignorant enthusiasts, who believe it to be a universal cure-all, and of the superstitious, who imagine that it can be successfully employed in the invocation of spiritual aid in the cure of disease. Like every other remedy, it can only be successfully employed by those who understand alike its powers and its limitations. The fact that the faith and confidence of the patient are required has led many to imagine that the benefits of mental therapeutics are limited to the ignorant and credulous. The intelligent student will see in the law of auto-suggestion another evidence that nature's laws are universal in their application; and that the benefits arising from their operation are never lost by acquiring a knowledge of them.

A word regarding the mooted question whether a subject can be caused, by means of suggestion, to commit crime. The danger from this source has been greatly exaggerated. It is true that many experimental murders and imaginary robberies have been committed; but real crime is a very remote possibility. Experiments made with a view of testing the question prove nothing, for the simple reason that they are experiments. The subject yields himself to control knowing that no real harm can befall him. Under such circumstances he will be very likely to do the bidding of the operator. He would plunge an imaginary dagger into a hypothetical

enemy, and he might plunge a real dagger into a man ; but, as experiments are not likely to be carried to an extent so eminently practical, it is impossible to say what would be the result. To provide for the commission of real crime we must presuppose (1) a hypnotist of criminal character ; (2) an unsophisticated subject, alone with the hypnotist ; and (3) a criminal tendency in the subject himself. Every practical hypnotist knows that it is difficult, if not impossible, to cause a subject to transgress his own code of morals. It is here that auto-suggestion erects an insuperable barrier for the protection of innocence and virtue against criminal suggestion. Conscience, or a resolution formed previously to entering the hypnotic state, operates as an auto-suggestion which cannot be overcome by the hypnotist. Persistence in criminal suggestion in such a case would be sure to restore the subject to his normal condition. It is evident that these remarks apply with equal force to sexual crimes. I am, of course, not prepared to say that there may not be exceptions to the rule here laid down, but the possibility must be very remote.

I would say in conclusion that the importance of hypnotism and hypnotic suggestion as a remedial agent in nervous, mental, and moral derangements can hardly be overestimated. Its value for the correction of aberrations due to neurasthenic and neurotic conditions has long been recognized by European alienists and neuropathologists, as well as its efficacy for the reformation of childish and youthful offenders. Some of the dangers connected with its practice have been exaggerated in the popular mind, and all those dangers may be avoided when the law of suggestion is fully understood.

VIII

HYPNOTISM IN ITS RELATIONS TO CRIMINAL JURISPRUDENCE

I HAVE been asked to pass a scientific opinion on the question whether hypnotism can be successfully employed to induce the commission of crime, and a legal opinion concerning the status of hypnotism in criminal jurisprudence. There are perhaps no two questions of more vital interest or intrinsic importance than these. When a confessed murderer is acquitted on the plea that he was hypnotized and compelled to commit the crime, a question is presented which is in some respects cognate to the old problem of emotional insanity. It is, however, of infinitely greater importance than the latter, for the obvious reason that emotional insanity could be made available as a defence only when it could be clearly shown that the victim had so grossly invaded the private rights of the accused as to deserve his punishment; whereas the defence which consists wholly of the allegation that some third person compelled the commission of the crime by means of hypnotism is equally open to the avenger of a grievous wrong and to the coldest-blooded murderer that ever scuttled a ship or cut a throat. It is evident that if such a defence is once admitted as an element of criminal jurisprudence, a very wide and hitherto unexplored

avenue of escape is opened to the criminal classes. Nevertheless, when a criminal is acquitted on such grounds it may be said in extenuation that the jury entertained a "reasonable doubt," or invoked the old common law maxim that "it were better that ninety-nine guilty men should escape than that one innocent man should be put to death." But when a confessed murderer is not only acquitted of the crime, but the alleged hypnotist is convicted of murder in the first degree on the testimony alone of said murderer, the question assumes a far more serious aspect. If such a thing can happen, no man is safe who incurs the enmity of the criminal class. As the books say of the charge of rape, "it is an accusation easy to make, but difficult to disprove." In the present state of popular opinion on the subject of hypnotism it is a charge impossible of refutation. The popular belief on the subject may be summed up in two sentences:

1. It is believed that a person may be hypnotized at a distance and against his will.
2. It is also believed that in the hypnotic state a person is under the absolute dominion of the will of the hypnotist, and can be compelled to perform any act, however repugnant to his feelings or his conscience.

Obviously, if these two propositions are true, hypnotism has a legitimate place in criminal jurisprudence. The scientists, however, who hold that hypnotism can be employed for criminal purposes do not all agree as to the truth of the first proposition, but they sustain the second with practical unanimity. It is to this second proposition, therefore, that we must first direct our attention; for if that is found to be untrue it is unimportant whether the first is true or false.

It must be premised that the study of hypnotism is yet in its infancy. No man can safely predict its future, as to either its uses or its abuses. That it is useful when legitimately employed, no one who is acquainted with the facts will deny. That it may be employed to the detriment of its votaries, is a proposition equally true of everything that is a power for good. That when its laws are understood they will be found to be promotive of the highest good of the human race, is a proposition sanctioned by every discovery yet made in the domain of nature's laws.

Little as is known of the ultimate possibilities of hypnotism, there are some things about it which have been definitely ascertained and are, broadly speaking, as well known now as they can ever be known. It is not necessary for one to be able to calculate the eclipses to enable him to know that the earth is round or to grasp the fundamental hypothesis of gravitation. Nor is it necessary for us to know the future possibilities of hypnotism to enable us to grasp its fundamental laws, since they have been definitely formulated. Generally speaking, we know what hypnotism is, and we know at least one of its fundamental laws. The researches of the European scientists have definitely settled that much, and for the purposes of our present inquiry it is sufficient.

The word "hypnotism" is derived from the Greek *ὑπνος* (*hypnos*), signifying "sleep." Dr. Braid, who was the originator of the term, defined it as "nervous sleep" or induced sleep.¹ This implied the theory, then prevalent, that a subject must be asleep in order to exhibit the phenomena of hypnotism. Professor Lié-bault, of Nancy, extended the researches of Braid, and

¹ *Neurypnology*, p. 13.

immortalized his own name by the discovery of the law of suggestion. Professor Bernheim, a pupil of Liébault, in conjunction with the latter, discovered that the Braidian definition was too limited in its scope to embrace all the phenomena, inasmuch as it was found that many of the distinctive results could be produced while the subject was in what Bernheim terms the "waking condition." Bernheim, therefore, defines hypnotism as "the induction of a peculiar psychical condition which increases the susceptibility to suggestion."¹ This implies the theory that persons are normally susceptible to suggestion. This conclusion, however, does not seem to be warranted, except in the sense that all are subject to the influence of others. There must be some abeyance of the objective faculties in order to produce the phenomena of suggestibility in the hypnotic sense — that is, in the sense that a suggestion can produce a hallucination. My definition of hypnotism would, therefore, substitute the word "induces" for "increases" in Bernheim's definition.

As before remarked, Professor Liébault discovered and formulated the law of suggestion. That law is now almost universally recognized by scientists throughout the world as *the* potent factor in hypnotism. I say "almost," for there are still a few exceptions, consisting of a constantly diminishing number of the followers of the late Professor Charcot, who believed that hypnosis could be induced only in hysterical patients. There is one other French savant who succeeds in astonishing himself and amusing the scientific world by the production of phenomena which demonstrate nothing but his own ignorance of the principle of suggestion. Then

¹ *Suggestive Therapeutics*, p. 15.

there is one English author who produced a universal guffaw among scientific men by publishing an exposé of the Frenchman, and succeeded in astonishing all Europe and America by demonstrating the fact that he knew less about the subject than the Frenchman himself. With these unimportant exceptions the law of suggestion is universally recognized among scientists.

Formally stated, the law is this:

Persons in a hypnotic state are constantly amenable to control by suggestion.

Broadly speaking, suggestion, as the term is employed in connection with hypnotism, is a statement, true or false, made to a hypnotic subject. Its potency resides in the fact that the hypnotized subject unhesitatingly accepts the statement or suggestion as true, and acts accordingly. Thus, a hypnotic subject may be made to believe that he is another person, or that he is an animal, or a demon, or an angel; and he will assume the character and act the part to the life, within the limits of his physical or mental capacity. He may be made to get drunk on water by suggesting to him that it is brandy; and he may then be made sober by giving him brandy accompanied by the suggestion that it is an antidote to the previous "stimulant."

These are the fundamental facts of hypnotism as they are recognized by the public, and it is upon these facts, thus broadly stated and superficially understood, that the conclusion has been based that hypnotism can be employed as an agent of the criminal. It is, perhaps, a natural conclusion for one who has witnessed only the common platform experiments. He sees the subject thrown into a state that is to him mysterious and inexplicable. He sees the subject in that condition become

apparently under the absolute control of the operator, and dominated by the most absurd suggestions. His natural conclusion is that if the operator chose to say to the subject that it was necessary for him to perpetrate a crime, he would be compelled to do so in obedience to the law of suggestion. This is the first conclusion at which the European scientists arrived; but they were not content with mere platform experiments and abstract deductions. So they instituted a series of laboratory experiments in which criminal suggestions constituted the salient feature. Subjects were hypnotized and paper daggers were placed in their hands, and the suggestion was made that it was extremely desirable that some imaginary person, or real one for that matter, should be incontinently slaughtered. It is unnecessary to say that the suggestion was in every instance obeyed with the greatest alacrity. It is almost superfluous to add that the experimenters, who were mostly medical gentlemen, were practically unanimous in the opinion that hypnotism was a very dangerous force in the hands of anybody but doctors.

It is my purpose in this paper to show that this view of the case is to the last degree superficial, and evinces a singular lack of appreciation of the real scope and significance of the law of suggestion. In their view of the question, suggestion would be confined to the oral declaration of the hypnotist to his subject. The truth is that the suggestions of the hypnotist are the least important of those which dominate the mind of the subject.

Suggestions are divided into two classes, — namely:

1. Suggestions by a second person, as by a hypnotist.
2. Auto-suggestions.

The first class is subdivided into two classes, — namely: 1. Oral suggestions. 2. Mental suggestions.

With the latter class we shall have nothing to do, as it belongs to a higher phase of psychic phenomena than we are considering.

Auto-suggestions are divided into four classes, namely: 1. Volitional auto-suggestions. 2. Suggestions of moral education and fixed principles. 3. Instinctive auto-suggestions. 4. Suggestions of the environment.

The greater part of the above divisions and subdivisions are explained by their terms. The subdivisions of auto-suggestions, however, require elucidation. Before proceeding to do so I desire to impress a very important fact upon the mind of the reader.

It sometimes happens in the course of experiments in hypnotism that two contrary suggestions are made at the same time. The invariable result is that great distress of mind is inflicted upon the subject, and it often results in bringing him out of the hypnotic state. When this effect does not follow, the stronger suggestion necessarily prevails. The importance of this fact will become obvious as we proceed.

1. A volitional auto-suggestion is one which the subject makes to himself before being hypnotized. For instance, if he anticipates the possibility that the hypnotist will place him in a ridiculous attitude, or one repugnant to his sense of propriety, he will resolve beforehand that he will not obey the suggestion. If, then, the anticipated suggestion is made by the hypnotist, it will be strongly resisted, and the potency of the resistance will be in exact proportion to the subject's innate sense of dignity or propriety. If that is very

strong, and the hypnotist insist upon his suggestion, the subject will be restored to his normal condition.

2. Suggestions of moral education and fixed principles are of a cognate character to the foregoing. These reach the very heart of the matter under consideration. Thus, if a subject be told to do anything that is contrary to the settled principles of his life, he will resist the suggestion with all the force of his moral nature. Consequently, when an immoral or a criminal suggestion is made by a hypnotist, whether it will be obeyed or not is purely a question of moral character. If the subject is strongly intrenched in moral rectitude he will resist; and, if the hypnotist persist, he will be restored to normal consciousness. "Strength of mind" is not a factor in the case. Strength of "will," in the ordinary acceptance of the term, has nothing to do with the result. "Will," in the psychic sense, is nothing more nor less than desire. Consequently, if the subject's desire to obey the dictates of conscience is stronger than his desire to obey the suggestions of the hypnotist, the auto-suggestion must prevail. In other words, there is no such thing in real life as a hypnotist having absolute control of a subject against the will of the latter.

3. Instinctive auto-suggestions are those which arise from the natural desire to protect one's own life or that of his wife or children. They are by far the strongest auto-suggestions that a criminal hypnotist would have to encounter in an effort to procure the commission of a crime by means of suggestion. It has often been said that a criminal hypnotist would have the power to induce a subject to commit suicide, or to procure an abortion, by means of suggestion. But such a use of

that power is obviously out of the question when we consider the inherent strength of the instinct of self-preservation, and the potency of the subjective clinging to the life of the foetus which is the inherent attribute of every mother. Besides, the same instinct of self-preservation would be a powerful factor in case of an attempt to instigate the commission of a murder. The subject would instinctively reason up to the consequences to himself in case of detection; and, even though his moral principles might not constitute an auto-suggestion of sufficient strength to enable him to withstand the suggestion of a criminal hypnotist, the consideration of his own safety would be more than likely to have that effect.

4. Suggestions of the environment are those which arise spontaneously in the mind of the subject from his knowledge of the nature of the experiments about to be made, of the character of the persons present, the objects of the experiments, and the desires of the experimenters.

In the whole range of experimental hypnotism there are no auto-suggestions that are more apt to modify results than are the suggestions of the environment. And there are none that are disregarded by a certain class of experimenters with such persistent, aggressive fatuity. Indeed, it is somewhat difficult at all times to eliminate, intelligently, these suggestions; and in a certain class of experiments it is practically impossible. The experiments which we are now considering belong to that category; and it may be set down as an axiom in experimental hypnotism that no laboratory experiment conducted for the purpose of ascertaining whether suggestion can be successfully employed to induce a hyp-

notic subject to perpetrate a crime is of any evidential value whatever.

When a subject is hypnotized for that purpose, he knows that he is among friends. He knows that they are law-abiding citizens who will take care that no harm shall result from the experiments about to be made. He generally knows that he is expected to carry out all suggestions made to him. He is very probably aware that he is expected to demonstrate the truth of the proposition that a criminal hypnotist can compel his subject to commit crime. Like all hypnotic subjects, he is anxious to win applause — to create astonishment. In short, he knows that he is the central figure in a comedy or farce which is about to be played in the interests of "science," and he feels that he is the "scientist." The inevitable consequence is that he resolves to carry out every suggestion of the hypnotist, knowing that no harm can possibly result. A paper dagger is placed in his hands, and he is told that a certain gentleman present is an enemy who "needs killing." This he is ready to do, and he proceeds to thrust his paper dagger into the heart of his "enemy," amid the applause of the assembled wisdom.

It is manifest that the moral character of the subject cannot enter as a factor in an experimental case of this kind. He is simply a player in a farce in which he assumes the rôle of the heavy villain. Moreover, the result could easily be reversed by merely suggesting to the subject that he was expected to disobey the criminal suggestions of the hypnotist. In short, the subject in such experiments will do just what he believes to be expected of him, and the suggestions of the environment will always afford some hint as to that, even if they amount to nothing more than an assurance that it is

perfectly safe for him to obey the suggestions made by the hypnotist. It is plain that a laboratory experiment can go no farther than the enactment of a farce.¹

Space forbids the citation of authorities to sustain the foregoing propositions, although they are numerous.²

It must be apparent to the intelligent reader that laboratory and platform experiments in this line have no possible evidential value; and when we remember that all the hue and cry that has been raised on the subject of "hypnotism and crime" is based upon these same laboratory experiments, it will be seen that the public have been led into an error of enormous proportions and of infinite moment in the administration of criminal justice. This, however, only pertains to the value of laboratory experiments as evidence. It must not be forgotten that while they do not prove that hypnotism can be employed for criminal purposes, neither do they disprove that proposition; they simply demonstrate the necessity for eliminating the results of experimental investigation from consideration.

The question of fact still remains: Can hypnotism be successfully employed for the perpetration of crime?

¹ Since the manuscript of this paper was forwarded to the publishers a new book has been placed in my hands, entitled *Hypnotism: How it is Done; Its Uses and Dangers*, by Dr. James R. Cocke, of Boston. This gentleman had the courage to make a practical experiment in this line. Standing in front of a deeply hypnotized subject, he placed a piece of cardboard in her hands, telling her that it was a dagger, and commanded her to stab him. This command she immediately obeyed with alacrity. He then handed her an open pocket-knife and again commanded her to stab him. She raised her hand as if to execute the command, but hesitated, and immediately had an hysterical attack, which, of course, put an end to the experiment. The doctor adds: "I have tried similar experiments upon thirty or forty people with similar results." He also states that he made a number of tests to prove that the subject was deeply hypnotized.

² For a fuller discussion of the subject, and a collection of authorities, see *The Law of Psychic Phenomena*, chap. x.

My remarks relating to auto-suggestions arising from the moral education and the fixed principles of the subject will have prepared the reader's mind for the only rational answer, namely, — it is purely a question of moral character. A criminal hypnotist in control of a criminal subject could undoubtedly procure the commission of a crime under exceptionally favorable circumstances. But a criminal hypnotist would simply waste his energies in hypnotizing a criminal subject; for a man of that character could, without doubt, be just as easily influenced in his normal condition. However that may be, when a man sets up hypnotism as a defence in a criminal trial, he proclaims himself a criminal character.

Beyond what has already been said of the worthlessness of experimental investigation, this is the only general proposition that can be predicated with certainty from a knowledge of the fundamental laws of hypnotism. But it practically covers the whole ground.

The first legal question that arises is, How far ought hypnotism to be admitted as a defence when it is pleaded? My answer is that it should never, under any circumstances, be admitted as a defence for the one who is clearly proved to have committed the crime. Drunkenness cannot be urged as a defence, and there is infinitely less reason for admitting hypnotism. In the one case a good man may be so far crazed by liquor as to become, in fact, utterly irresponsible. Yet the fact is rejected as a defence, on the ground that he voluntarily rendered himself irresponsible by getting intoxicated. The hypnotic subject should be held to the same rule and for the same reason; for no man can be hypnotized against his will. This is the practically universal testimony of all the scientific writers on the subject. He voluntarily places himself in the power of a hypnotist

whom he more than probably knows to be a criminal character; and he should be held to the same accountability for the results as if he had voluntarily "placed an enemy in his mouth to steal away his brains." Moreover, as I have previously shown, the hypnotized subject will never commit a crime in that state which he would not commit in his normal condition.

The next legal question is as to the admissibility of the testimony of the alleged hypnotic subject in a criminal prosecution of the alleged hypnotist as an accessory before the fact. It is difficult to imagine any legal grounds for the admission of his testimony at all; for if it is true that he was so deeply hypnotized as to be an irresponsible agent in the hands of the hypnotist, he was necessarily in a state that would preclude the possibility of his having any definite recollection of what happened. Indeed, his whole testimony would be open to the suspicion that he was merely reciting the details of a subjective hallucination. In that case his testimony would be literally "of such stuff as dreams are made of"—the "baseless fabric of a vision." Obviously, it should have no more standing in a court of justice than an alleged dream. Consequently, if it is clearly proven that he was hypnotized, his own testimony should be excluded as against the other party concerning what happened during the period of his irresponsibility.

This brings up the question, so often mooted, of the propriety of hypnotizing a person in court for the purpose of questioning him concerning what happened to him during a previous hypnotization. From a legal standpoint this is a most intensely absurd proposition. Not one of the conditions which give value to human testimony would be present. In the first place, he could not be punished for perjury if he swore falsely; and

the instinct of self-preservation would cause him to swear falsely if the truth would militate against him. Moreover, being in a hypnotic state, he would be amenable to control by suggestion, and a cross-examination would utterly confuse him. A cross-examination by a competent lawyer consists largely of artful suggestions in the form of leading questions; and a hypnotized witness would necessarily either be controlled by them, or restored to normal consciousness by a conflict of suggestions. Clearly, a hypnotized subject can have no legitimate standing as a witness in a court of justice.

I have now briefly examined the salient features of the problem from both the psychological and the legal standpoint, and I hope that I have made it as clear to others as it is to me that its psychological features are less repulsive and dangerous to the public than many interested writers have pictured them, and that the few legal problems involved are easy of solution without a resort to legislation. Hypnotism has no legitimate place in criminal jurisprudence. The attempt to thrust it into that field is the result of a determination on the part of interested parties to confine the uses of hypnotism to a select few. This effort has been aided by popular ignorance and criminal instinct, until our courts of justice are now threatened with an inundation of cases involving questions that are new and strange to lawyers and judges, and threaten jurors with paralysis. It is humiliating, but it is true, that in the last quarter of the nineteenth century we are threatened with a repetition of the insanity of the seventeenth. The ghost of Cotton Mather stalks abroad at noonday and gibbers from the forum.

IX

PSYCHOLOGICAL PROBLEMS RELATING TO CRIMINAL CONFESSIONS OF INNOCENT PERSONS¹

MY theme to-night is hoary with frosts of centuries, and the question that it presents is as mysterious as any of the many that have presented themselves for solution by students either of forensic medicine or of experimental psychology. My only hope is that I may be able to say something that is not as venerable with antiquity as the theme itself. It is not my purpose, however, to formulate a new scientific dogma; but merely to suggest a method of study of a subject that is as important as it is ancient, and is as vital to-day as it ever has been in the history of criminal jurisprudence. If, therefore, I shall at any time seem to be dogmatic, I beg pardon in advance.

It is well known to every student of forensic medicine that, from time to time in the history of criminology, cases have been reported of criminal confessions made by persons who have subsequently been proven to be entirely innocent.

I will not weary you by extensive citations of particular instances; for every student of medical jurispru-

¹ Read before the Medico-Legal Society, May 16, 1900, in joint session with the Psychological Section.

dence is familiar with the facts and their legal aspects. I have, however, selected one typical case, because it embraces all the psychological features which I shall undertake to examine. In the course of a learned discussion of the legal phases of this class of cases, Mr. Wills, in his able treatise on *Circumstantial Evidence*, epitomizes the case referred to in words following:

"A very remarkable case of this nature was that of the two Boorns, convicted in the Supreme Court of Vermont in September Term, 1819, of the murder of Russel Colvin, May 10, 1812. It appeared that Colvin, who was the brother-in-law of the prisoners, was a person of weak and not perfectly sound mind; that he was considered burdensome to the family of the prisoners, who were obliged to support him; that on the day of his disappearance, being in a distant field where the prisoners were at work, a violent quarrel broke out between them, and that one of them struck him a violent blow on the back of the head with a club, which felled him to the ground. Some suspicions arose, at that time, that he was murdered, which were increased by the finding of his hat in the same field, a few months afterwards. These suspicions in process of time subsided; but in 1819, one of the neighbors having repeatedly dreamed of the murder, with great minuteness of circumstances, both in regard to his death and the concealment of his remains, the prisoners were vehemently accused, and generally believed guilty of the murder. Upon strict search, the pocket-knife of Colvin, and a button of his clothes, were found in an old open cellar in the same field; and in a hollow stump, not many rods from it, were discovered two nails, and a number of bones believed to be those of a man. Upon this evidence, together with the deliberate confession of murder and concealment of the body in those places, they were convicted and sentenced to die. On the same day they applied to the legislature for a commutation of the sentence of death to that of perpetual imprisonment; which as to one only of them was granted. The confession now being withdrawn and contradicted, and a reward offered for the discovery of the missing man, he was found in New Jersey, and returned home in time to prevent the execution. He had fled for fear that they would kill him. The bones were those of an animal. The prisoners had been advised by some misjudging friends that, as they would cer-

tainly be convicted, upon the circumstances proved, their only chance for life was by a commutation of punishment, and that this depended on their making a penitential confession, and thereupon obtaining a recommendation to mercy."

It is, as before remarked, useless to multiply illustrations of this class of cases, since every lawyer and every physician present, who is familiar with the literature and history of criminal jurisprudence, will recall to mind enough instances to fill a volume. Moreover, all will agree that a great majority of such confessions have been simply inexplicable. It is true that some cases have been recorded where it has been found that the confession was made to shield some dear friend or relative, who was really the guilty party. Other cases have been noted where it was suspected that the accused was tired of life, and resorted to confession of guilt as the easiest way of ridding himself of a burden too grievous to be borne.

In the days when the rack was the great instrument of judicial inquiry, it was, perhaps, natural to suppose that some confessions were made in order to obtain temporary release from torture; although, as I shall presently show, this should not be considered as a valid explanation in cases where the crime charged was punishable by death. Again, it is well known that confessions have often been made under promise of judicial leniency, and in some instances, where circumstantial evidence was strongly presumptive of guilt, it may be supposed that the promise was the moving cause of confession, even when the party was actually innocent.

These and other cognate causes may sometimes be invoked to account for sporadic cases of criminal confessions by innocent persons; but when they are all

taken into account, the fact remains that the great bulk of such confessions are, or have been until recently, utterly inexplicable. That I am not exaggerating when I say that the great bulk were shrouded in impenetrable mystery, will abundantly appear, when it is remembered that thousands and scores of thousands of the best known cases were those of persons who were accused of witchcraft. All the other known cases were, in point of numbers especially, comparatively insignificant; although many of them were apparently well authenticated. The witchcraft cases, however, present two points of vantage in this discussion. The first is in that when a person confessed herself guilty of witchcraft, she must be presumed to be an innocent person until it is judicially or scientifically determined that there is such a crime as witchcraft. That, of course, was not difficult in the good old days; but we may now safely assume that a confession of the crime of witchcraft was a clear case of a criminal confession by an innocent person. The second point of vantage is that such cases point definitely to the fact that it is a purely psychological question with which we have to deal.

When innocent children and reputable women confess to crimes, the penalty for which is the most horrible form of death, we may know that they *believe* what they say. Knowing this, we also know that it is a mental state or condition which we have to diagnose. In attempting this diagnosis, it must be remembered that the psychological principles which apply to one case are equally applicable to all.

I have said that the victims of witchcraft prosecutions evidently believed that their confessions were veridical. This is unquestionably true. We must, therefore, find

a psychological principle under which a perfectly innocent person may be made to believe that he is guilty of a capital crime; and, so believing, be made to confess the crime, knowing that immediate death is the inevitable result of the confession. To that end we must find: First, a universal psychological law, applicable to all persons alike, conditions being equal, under which an innocent person can be compelled to believe that he has committed a capital crime. Secondly, we must find another universal law under which a condition of mind may be induced in which death loses its terrors.

It is, perhaps, superfluous to remark that under the old psychology such laws could never have been discovered. But most of those here present will anticipate me when I say that the new psychology reveals just what we are looking for; and that the law of suggestion is the salient feature of our theme.¹ This law was discovered by a European scientist; and, as it was first formulated, it was to the effect that persons in a hypnotic state are constantly amenable to control by the suggestions of others. Later on, the law of duality of mind was formulated, and as a working hypothesis a sharp line of demarcation was drawn between the already recognized two states of consciousness.

I need not dwell upon the supreme potency of suggestion, for every student of psychic phenomena is aware that a subject may be made to believe himself to be a dog or a devil, the spirit of a deceased person or a living person other than himself; and that he will carry every suggestion to its logical conclusion so far as it is physically possible. It follows that he may be

¹ See discussion of Suggestion in *Hypnotism in its Relations to Criminal Jurisprudence*.

made to believe that he is guilty of crime. All that is necessary is that the suggestion be made with strength, vigor, and persistency. Reason is dethroned; experience counts for nothing; the evidence of the senses is impeached; the centre of control over the dual mental organism is displaced, and as long as this subjective state continues, or as often as it is renewed, the subject is dominated by the central idea embraced in the suggestion.

We have now found the law for which we were in search, namely, the law under which an innocent person can be compelled to believe that he is guilty of a capital crime.

The conditions under which this seemingly impossible state of affairs can be brought about must now be considered. To those not fully acquainted with the various phases of subjective states and conditions, but have learned a little of the common phenomena of hypnotism, the solution of the problem will seem to be referable to a condition of profound hypnosis. This, however, will be seen to be totally inadequate when it is remembered that when criminal confessions are made by innocent persons they always seem to be in full possession of their normal faculties.

Neither of these suppositions, however, is correct. That is to say, it does not require a condition of profound hypnosis to render a subject "suggestible"; nor is any subject in full possession of his normal faculties when he is suggestible; that is, suggestible in the degree required for the production of the phenomenon under consideration. There must be some degree of abeyance of the objective faculties; although it may be so slight as to render it impossible to detect any abnormality in

the actions of the subject. How slight a cause is sufficient to render a subject suggestible, many here present can doubtless testify if they will recall their experiences. For instance, it is well known that when any one visits a dentist's office for the purpose of having an aching tooth extracted, in nine cases out of ten the pain will cease the moment he enters the operating-room. And I want to say to every surgeon here present that this is a fact of profound significance and of infinite value to humanity; for it points to a general law under which painless surgery is possible by means of suggested analgesia, and without profound hypnosis. That law may be stated in a few words: An imminent and inevitable surgical operation invariably throws the patient into a partially subjective state, and in that state he is suggestible. It follows that if the surgeon understands the law and the methods of suggestion, he can perform a painless operation. I pointed out this fact in the *New York Medical Journal* as early as 1894; and since then hundreds of successful experiments have been made. The common experience mentioned in regard to aching teeth is demonstrative that local anæsthesia is produced by mental emotion; and the fact that this can be followed up by a painless operation, by simply making a positive suggestion of analgesia, is demonstrative that the patient was in a subjective state from the beginning.

This is somewhat of a digression; but I merely wish to show how slight a cause is sufficient to induce the subjective condition, to suspend the reasoning faculties, and to cause the subjective mind to dominate the dual mental organism. The observation and experience of every physician and surgeon will at least bear me out in the assertion that fear and dread, especially of im-

minent and inevitable death, will induce the subjective condition; and that painless death is, under this law, the rule among all sentient creatures. Illustrations might be multiplied indefinitely, but it is unnecessary in this presence. It will be sufficient to recall the well-known fact that criminals, after all hope has fled, and the death sentence has been pronounced, invariably lapse into a state of profound indifference and meet death with stoical fortitude, — often with cheerful alacrity.

Every student of psychic phenomena is aware of the extreme facility with which a sensitive subject may be thrown into the subjective condition. Thus, Abbé Faria was accustomed to hypnotize his subjects by gazing upon them for a few moments and then suddenly shouting, "Dormez!" (Sleep!) in authoritative and strident tone of voice. Charcot performed the same feat by flashing a Drummond light into the eyes of his patients; and others have induced profound hypnosis by suddenly sounding a Chinese gong. In short, it is well known to all hypnotists that sudden fright is a potent agency for the induction of the subjective condition.

What is more to our present purpose, however, is the fact that a never failing emotional agency for the induction of the subjective condition is the dread or fear of imminent and inevitable personal calamity. It may be set down as axiomatic that Nature is ever kind to the victim of the inevitable. And this is true whether it is inevitable death or an inevitable surgical operation. Where the two conditions of imminence and inevitability are present the rule is invariable. It is Nature's compensation for her prodigality of life and the universality of death made necessary by the process of organic evolution. The apparent cruelty of the law that all

must die is mitigated in the only way possible, namely, by universal immunity from pain during the process of dissolution. And this immunity is made possible by the spontaneous induction of the subjective condition upon the near approach of the king of terrors. Even the soldier in battle experiences this immunity, — not only from pain when struck by a bullet, but from all fear of death while the battle lasts. And, if mortally wounded, he treads the inevitable path without fear and without regret.¹

I think we may now safely assume that we have found the second universal law which we have been seeking, namely, the law under which a condition of mind may be induced which robs death of its terrors.

It seems like a work of supererogation to point out formally the application of these laws and principles to the cases under consideration. It is obvious that in the cases recorded of criminal confessions by innocent persons, the conditions were perfect, first, for the induction of the subjective condition; and secondly, for suggestion to do its perfect work, in (a) forcing upon the subjective mind of the victim a firm belief in his own guilt, and (b) in compelling him to confess his guilt. Let us glance at these conditions for one moment.

The first factors to be considered are the accusation, the arrest, and the imprisonment. These alone in the case of an innocent person would be sufficient to induce a feeling of terror and despair and a dread of impending death. For it must be remembered, as a factor of profound significance, that in all the cases recorded, so far as I am aware, the crimes charged were punishable by death. Were this factor absent, much of what has

¹ See article, *Hypnotism, A Universal Anesthetic in Surgery.*

been said would lose its significance; for it is the fear of impending death that induces the subjective condition.

The next factor to be considered is whatever may exist in the way of circumstantial evidence of guilt. Not that circumstantial evidence would, *per se*, convince an innocent person of his own guilt; but that he would estimate it at its full value as a link in the chain which fate was forging for his destruction. Of course the stronger the chain of circumstantial evidence the greater would be his despair of being able to overcome it; and if he should be unable to explain it away, his despair would be complete. Death would stare him in the face, and every condition necessary to the induction of the subjective condition would be present and active. All this, however, would be insufficient to induce a confession of guilt, or a doubt in his own mind as to his innocence. In addition to all this there must be a strong, vigorous, affirmative suggestion of guilt coming from another. Those who are familiar with the methods of detectives in this day and age of enlightenment, may have some idea of the suggestions that are borne in upon the unhappy victims of circumstances. Fortunately we are not left entirely to conjecture as to the methods employed in the golden days ago; for we have at least one concrete example on record which typifies all the rest, ancient and, probably, modern. It occurred in the days of Cotton Mather. In President Andrew D. White's great work on *The Warfare of Science with Theology*, he gives a very graphic account of the New England persecutions for witchcraft; and in speaking of the confessions that were common in those days, he says:

“Confessions of witchcraft abounded; but the way

these confessions were obtained is touchingly exhibited in a statement afterwards made by several women. In explaining the reasons why, when charged with afflicting sick persons, they made a false confession they said:

“ . . . By reason of that suddain surprizal, we knowing ourselves altogether Innocent of that Crime, we were all exceedingly astonished and amazed, and consternated and affrighted even out of our Reason; and our nearest and dearest Relations, seeing us in that dreadful condition, and knowing our great danger, apprehending that there was no other way to save our lives, . . . out of tender . . . pity perswaded us to confess what we did confess. And indeed that Confession, that it was said we made, *was no other than what was suggested to us by some Gentlemen; they telling us, that we were Witches, and they knew it, and we knew it, and they knew that we knew it, which made us think that it was so;* and our understanding, our reason, and our faculties almost gone, we were not capable of judging our condition; as also the hard measures they used with us, rendered us incapable of making our Defence, but said anything and everything which they desired, and most of what we said, was in effect a consenting to what they said. . . .”

Here, then, we have a typical example of perfect antecedent conditions, and of the most effective method of producing the result. We have the arrest of innocent persons, the imprisonment, the accusation of a crime punishable by death, the dethronement of reason, the vigorous suggestion, so strongly enforced as to cause the *belief* of guilt in the minds of the victims, and we have the consequent confession. I submit that no student of experimental psychology of the present day, knowing all that is known of the law of suggestion, and practised in the methods of enforcing a false suggestion, could formulate a “set phrase of speech” more perfectly adapted to the purpose than the one we have quoted.

When we add to that form of words the dominating personality of the "Gentlemen" inquisitors, the constant iteration and reiteration of the charge of guilt, the exhortation to open confession as a recipe for curing the ills of the soul in this world, and a fire insurance policy for the next, we can readily see that if they had not confessed, and believed in the verity of their confession, it would have constituted an exceptional case—a suspension, in fact, of a law of nature.

It may be objected that the witchcraft cases presented exceptionally favorable conditions—conditions not present in the closing hours of the nineteenth century, and, consequently, not applicable to any possible case in current history. To this it may be replied that it is fortunately true that the witchcraft cases are not likely to be repeated in the future. It is also true that the conditions were exceptionally favorable, in that the victims were mostly women and children. But the law is the same in all cases; and it will readily be seen that the law and the reasoning are as applicable to the case cited at length in the beginning of this paper as it is to the witchcraft cases. The latter predominate in numbers, it is true, but it must be remembered that all those cases are free from doubt; for the reason that when a party confesses to the crime of witchcraft we know that she is innocent. But we do not know how many innocent men have been hanged in consequence of confessions of guilt. It must also be remembered that subsequent proof of innocence is the exception; so that the preponderance of witchcraft cases may not be nearly so great as appearances indicate.

These remarks apply to modern times as well as to the time when a bare confession was considered con-

clusive evidence of guilt. And this must be my excuse for thrusting an apparently obsolete question upon the attention of this society. It is true that in this country the *corpus delicti* must be established before any one can be punished for murder; and it has been held that the prisoner's confession, when the *corpus delicti* is not otherwise proven, is insufficient for his conviction. But it has also been held that when the *corpus delicti* is otherwise established the prisoner's confession is sufficient. I think, however, that later decisions require further corroborative evidence. Be this as it may, we will assume that the latter, and more humane rule, prevails. Assuming this for the sake of the argument, it would seem that all possible safeguards had been thrown around this class of cases. But this idea will be dispelled when it is remembered that even the *corpus delicti* can be established to the satisfaction of our courts and juries by a very slight degree of circumstantial evidence. Witness the case of the Chicago sausage maker, who was accused of cooking his wife, and possibly, otherwise utilizing her in his business. That case was not at all complicated — or simplified — by a confession. A possible motive was shown, and his wife had disappeared; but beyond that the tangible evidence of guilt consisted of a finger-ring and a piece of bone found in the tank in which it was supposed that his wife had met her doom. Does any one imagine that if he had confessed the crime the finger-ring and the piece of bone would have been called into requisition? The evidence in that case, establishing the *corpus delicti*, was curiously parallel to that in the Boorns' case quoted. In the latter case a motive was shown, and the supposed victim had disappeared. Beyond that the evidence was confined to a trousers-button, a piece

of bone, a pocket-knife, an old hat and some nails, all assumed to have belonged to the supposed victim. In neither case was the death of the supposed victim proven by any positive tangible evidence whatever. But that is neither here nor there. The point is that even if the rule prevails that when the dead body is in evidence, an otherwise uncorroborated confession would be insufficient to warrant a conviction, the danger is not perceptibly diminished. For in view of the small amount of circumstantial evidence required to establish so vital a point as the *corpus delicti*, it is obvious that, if that were not in question, an exceedingly small amount of circumstantial evidence would be sufficient to sustain a confession. Moreover, the requisite amount is morally certain to be forthcoming, since a certain weight of such evidence is always necessary to warrant even an arrest for a capital crime.

In this connection a curious psychological fact must be mentioned, for it is invested with a profound significance in connection with the question of circumstantial evidence. Every experimental psychologist will bear me out in the assertion that whenever a person in the subjective condition makes a statement of fact, he will seek to corroborate that statement by every means available. And this is true whether the statement is veridical or false — whether it is adverse to his interests or favorable, whether it is sensible or idiotic. One of the most marvellous phenomena in this connection is shown in the wonderful ingenuity displayed by the psychic in finding corroborative reasons and evidence to sustain his assertions. This fact is accounted for in two ways, — first, by the fact that the subjective mind is characterized by monumental egotism; and secondly, by the fact that, under the law of suggestion,

the subjective mind is incapable of assimilating a fact that is not corroborative of the suggestion that is dominant for the time being.

Hence it is that when an innocent person confesses a crime, he will utilize every scrap of circumstantial evidence against himself for the sake of corroborating his false confession.

It will now be seen that, in the admission by courts of justice of confessions of guilt by persons charged with capital crimes, there is constant and imminent danger of being led into that greatest of all judicial misfortunes—the capital punishment of an innocent person. If that humane and merciful maxim of the law is to prevail, that it is better that ten guilty men should escape than that one innocent person should be punished, a rule of evidence must be adopted, forbidding the consideration, under any circumstances, of confessions by persons charged with capital crimes. And the first step in that direction should be the abolition of what is known, in the parlance of criminal detectives, as the “sweating” system; that system under which a detective is turned loose upon a person charged with murder, and allowed to browbeat him into a confession before he has a chance to employ counsel. It matters nothing that the rule prevails excluding the confession if the party is not cautioned that all he may say will be used against him on the trial; for the psychological condition necessary to secure a “voluntary” confession can just as well be induced by a shrewd detective after such a warning as before. Every one who is familiar with the system alluded to will bear me out when I say that the facilities are just as available to-day for inducing the psychological conditions necessary for securing a confession of guilt from an innocent person,

as they were under the inquisitorial system of days of medieval superstition.

These remarks, as before intimated, apply exclusively to confessions of capital crimes; for it is not certain that the psychological conditions which we have been considering could be induced in cases not involving the life of the accused. That is to say, it is not certain that the subjective state could be induced in criminal cases by anything less than the fear of death or of physical torture.

As in all other cases where the line of observation is new, much must remain in doubt as to the limit of application of the law of suggestion to criminal confessions. But I think we are even now warranted in assuming that the following fundamental principles are reasonably well established.

1. The dread of impending death will cause certain persons to enter, spontaneously, the subjective condition.

2. In the subjective condition the subject is constantly amenable to control by the power of suggestion.

3. A strong suggestion, vigorously enforced by a dominant personality upon a person in the subjective condition, will cause the latter to believe in its absolute verity, and to act upon it in all essentials as though it were true, even though the suggestion be contrary to fact, reason, experience, and the evidence of the senses.

4. Finally, the proposition that works back to the foregoing and invests it with perennial importance to courts of criminal justice, is that — assuming the constancy of Nature — whatever power, faculty, or limitation belongs to any one individual, must exist, potentially, in every member of the human family.

X

HYPNOTISM A UNIVERSAL ANÆSTHETIC IN SURGERY

THE question has often been asked, "Can hypnotism be generally used as an anæsthetic in surgery?" The answer has uniformly been that it cannot. Both of the great schools of hypnotism — the Nancy and the Paris school — unite in the emphatic declaration that "it cannot take the place of chloroform." The reason given is that it is impossible to hypnotize a person at the time of an operation except in the comparatively rare cases where the patient has previously been in the habit of being hypnotized. It is generally admitted by all modern scientific writers on the subject that hypnotism can be successfully employed as an anæsthetic in the most severe surgical operations, under certain exceptionally favorable conditions. The first of these is stated above, and the second is that a state of profound hypnotic sleep must first be induced. Most writers dismiss the subject with a statement equivalent to the foregoing.

The object of this paper is not so much to call in question the correctness of the conclusions of writers on this subject as to suggest an entirely new line of inquiry with a view of ascertaining if Nature has not provided a universal anæsthetic in a condition cognate to that of hypnosis. Confining the latter to its original significa-

tion, or to that of its Greek radix, it means, simply, "sleep." And it seems probable that the conclusion of the hypnotists regarding the use of hypnotism in surgery may have been influenced by the limitations of the signification of the term; although Bernheim has pointed out that the power of suggestion (which is *the* potent factor in hypnotism) is not confined to the sleeping patient. Indeed, Bernheim's definition of hypnotism enlarges its scope far beyond the limitations of the Braidian definition, which is "induced sleep." He says: "I define hypnotism as the induction of a peculiar psychical condition, which increases the susceptibility to suggestion."¹ For the purposes of this article this definition will be accepted as substantially correct.

Before proceeding to the main line of argument it may be well to give the non-professional reader a clear idea of the meaning of the word "suggestion" as it is employed in hypnotic science. Suggestion is a statement (true or false) made to a hypnotized subject. Its potency consists in the fact that in the hypnotic condition the subject unhesitatingly believes the statement or suggestion, and acts upon it just as though it were true. Its potency as a therapeutic agent consists in the fact, first, that a subject in the hypnotic state is constantly amenable to control by suggestion; second, that in the hypnotic state the subject has complete control over the functions and sensations of his body; and, consequently, that if the suggestion is made to a hypnotized subject that he feels no pain, all pain instantly ceases. It is thus that a state of anæsthesia is induced which enables a surgeon to amputate a limb without inflicting the slightest pain upon the patient.

Bernheim pertinently remarks that "it is suggestion

¹ *Suggestive Therapeutics*, p. 15.

that rules hypnotism." This is true in the sense that when a subject is in the hypnotic state he is constantly amenable to control by the power of suggestion. This is the fundamental law of hypnotism. It is also true that hypnotism *may* be induced by suggestion. The Nancy school holds that it is and can be induced in no other way. This, as I have elsewhere¹ pointed out, is a fundamental error; and it is an error that has led to many erroneous conclusions regarding psychic phenomena of various classes.

It is also an error to suppose that it requires a state of profound hypnotic sleep to induce a state of anæsthesia. It is this error that has led to the belief that hypnotism cannot be generally employed as an anæsthetic in surgery. It is my belief that in a great majority of cases it can be successfully so employed. I do not pretend to dogmatize on the subject. It is too early for that. But I do say that there are facts in abundance which point in that direction; and they are facts within the common knowledge and experience of mankind. I propose to invite the attention of the medical profession to a few of these facts for the sole purpose of stimulating inquiry and suggesting a line of experiment, which may or may not lead to important results, but which can at least do no harm. If successful, they will demonstrate the existence of a law, hitherto unsuspected, which, properly understood and intelligently applied, will enable the profession to employ hypnotism as a universal anæsthetic in surgery.

The fundamental propositions of my hypothesis are few and easily understood. They are:

1. Persons in the hypnotic state are constantly amenable to control by suggestion.

¹ See *The Law of Psychic Phenomena*, p. 89.

2. The hypnotic state can be induced without the aid of suggestion.

The first of these propositions no hypnotist of intelligence will question. It is, as before remarked, the fundamental law of hypnotism, and little time will be employed in its elucidation. It is, however, not so generally known that the proposition is true of all grades and degrees of hypnotism. Bernheim has very clearly pointed out the fact that suggestion is potent in many subjects even in what he terms the "waking state"; although it must be doubted whether any one in a perfectly normal condition can be influenced by suggestion so far as to produce a hallucination. That is to say, it must not be understood that the term "waking state" implies that the patient is in no degree hypnotized. It only means that the patient is hypnotized in so slight a degree that he appears to be awake and in his normal condition. There must always be some degree of hypnosis — some abeyance of the objective faculties — to render the subject amenable to control by suggestion. But that degree may be very slight, as the following observations by Bernheim will demonstrate:

"Some of them at least show exactly the same phenomena in the waking condition as in the hypnotic state; some exhibit suggestive catalepsy with muscular contraction, or a varying contracture only; others, catalepsy with automatic movements; others, at the same time, suggestive sensitivo-sensorial anæsthesia; and others still, all suggestive phenomena up to hallucination." (*Suggestive Therapeutics*, p. 79.)

Again, on page 81, we find the following:

"In one of my somnambulistic cases (S—, whose history I have already given) I can obtain all possible modifications of sensibility in the waking condition. It suffices to say, 'Your left side is insensible.' Then, if I prick his left arm with a pin, stick the pin into his nostril, touch the mucous membrane of his

eye, or tickle his throat, he does not move. The other side of his body reacts. I transfer the anæsthesia from the left to the right side. I produce total anæsthesia, which was, on one occasion so profound that my *chef de clinique* pulled out the roots of five teeth which were deeply imbedded in the gums, twisting them around in their sockets for more than ten minutes. I simply said to the patient, 'You will have no feeling whatever.' He laughed as he spit out the blood, and did not show the least symptom of pain."

On page 83 the following case is related:

"In G— (Marie, whose case I have already related) I can induce catalepsy, automatic movements, anæsthesia, and hallucinations in the waking condition. I wish only to speak of the anæsthesia. After having ascertained that sensation throughout the body was perfect, I said to her, 'You have absolutely no more feeling in your right upper limb, it is just as if dead.' With her eyes closed she no longer reacts to the pin. She does not know whether her arm is up or on the bed; her muscular sense is gone. In order to exclude all idea of deception, I use Du Bois-Reymond's apparatus, varying the intensity of the current by alternately separating and approximating the coils of the induction apparatus. A rule graduated into centimetres indicates the degree of separation of the coils. Now I have already determined that the tingling caused by the electricity was perceived by this subject when the separation between the ends was five centimetres, and that the pain became unendurable, the patient drawing back the arm suddenly, when the separation was from three to two centimetres. These figures remained absolutely the same when her eyes were tightly closed, so that she could not have observed the degree of separation, and I have proved this several times. By this means I determined that the pain is really perceived and not pretended.

"This being granted, I provoke anæsthesia by affirmation, and place the electrodes on her arm with the greatest current attainable with the greatest approximation of the coils. The painful sensation thus produced is normally absolutely unbearable."

Professor Bernheim was, I believe, the first to mention these phenomena of suggestion in the waking condition, in a report made to the Congress for the Advancement of Science in 1883. They have since been confirmed by his European contemporaries, Bottony, Du-

montpallier, Richet, and others; and in this country the same phenomenon was independently observed by Dr. Hammond.

It must be remembered, however, that these subjects were patients of Professor Bernheim, and had frequently been hypnotized by him before the experiments were tried. The cases have, however, a direct bearing upon the question before us, inasmuch as they show how slight a degree of hypnosis is necessary to enable the operator to produce a state of complete analgesia by suggestion; for it is obvious that a surgical operation of the most severe character could have been performed upon either of the patients mentioned. They are demonstrative that it is not necessary to induce a state of profound hypnotic lethargy in order to perform a painless surgical operation.

My second proposition, that "the hypnotic state can be induced without the aid of suggestion," will now be discussed. I have shown, in *The Law of Psychic Phenomena*, by quotations from the works of Dr. Braid, the father of modern scientific hypnotism and the originator of the term, that a state of profound hypnosis can be induced without the aid of suggestion. I shall not repeat my observations there made, but will attempt to show that Nature has provided a means for the induction of the hypnotic state in all cases where a surgical operation becomes a necessity.

In attempting to do this I shall rest content if I can make a *prima facie* case. I will endeavor to show that the law (of nature) is on my side, and will then submit the case to a jury of experts consisting of the medical profession.

I will now invite attention to a few well-known facts the significance of which never seems to have been ap-

preciated. In the work before mentioned I have drawn attention to the fact that when a person is in imminent and deadly peril he is instantly thrown into a state of anæsthesia; or, in other words, into a partially hypnotic condition. It is the universal testimony of soldiers who have been in battle that the moment the fight commences all fear vanishes. It is also the universal testimony of those who have been wounded that a stricken soldier never feels a wound, and never knows he is wounded until he is disabled. Surgeon-General Hammond once remarked in my hearing: "A soldier never knows he is wounded unless he is stricken down; and, if his wound is mortal, he dies without pain and without regret." It seems to be a universal law that, when death is inevitable, the nearer it approaches the less it is feared; and that, when it comes, it brings no pain and no sorrow to its victim. The reason is obvious. The patient passes into a hypnotic state, or a condition cognate thereto; and he is in a complete state of analgesia, body and mind, if the term may be applied to the condition of exemption from mental suffering. The phenomenon is strikingly exhibited in cases of criminals who have been sentenced to be hanged. The moment all hope is lost and death is inevitable, they relapse into a state of profound indifference; and, when the fatal hour arrives, they march to their doom without fear, without emotion, and without regret. It is often said of them that they "exhibited great courage" and "died game." The truth is that Nature has done for them just what it does for all living creatures, — namely, it has, upon the approach of death, thrown them into that subjective or hypnotic condition which banishes pain and robs death of its terrors.

Volumes might be filled with illustrations of the fact,

which is well known to the medical profession, that when death is imminent or inevitable Nature provides an anæsthetic in the hypnotic condition which insures an easy and painless, if not a pleasurable, passage to the other side. I say "hypnotic condition," because it possesses all the salient characteristics of that state, even to suggestibility, as is shown in the well-known fact that the hallucinations of the dying invariably correspond to the suggestions embraced in their lifelong beliefs.

I now desire to invite attention to another class of facts, which are equally well known, but the significance of which does not seem to have been appreciated. I will begin by citing one which almost any one of adult age can verify from experience. Did any one ever go to a dentist's office with a raging toothache and a firm resolution to have the offending member removed, without finding that all pain ceased as soon as the dentist's office was reached? If any one has had a different experience the fact has not been recorded. There may have been apparent exceptions to the rule, but it will be found that, in every case where the tooth did not cease to ache when the dentist's office was reached, it was because the patient had not fully made up his mind to part with the tooth without first making an effort to save it by some means less heroic than elimination. It may be safely said that, in all cases of toothache where extraction is resolved upon, the pain ceases when the patient approaches the operating chair. This phenomenon means something. Nature does not produce phenomena for fun, and it is the province of science to interpret this meaning on lines which will relieve Nature from the imputation of habitually perpetrating a joke on the victims of toothache. Here, then, is a state of local anæsthesia in-

duced by a mental emotion. That emotion is produced by an approach to a surgical operation. The question is, What is the mental condition thus produced? Is it not a condition cognate to that of hypnotism, and identical with that induced by imminent and deadly peril? Certainly the phenomena are the same, and we have therefore a right to infer that the cause is the same. Nor does this phenomenon stand alone. It is more frequently observed than any other, because every one has had teeth pulled. But it is also true that in other surgical operations all pain ceases when the surgeon begins to display his instruments in presence of the patient. This being true, it may be set down as a general proposition, provisionally at least, that the near approach to a surgical operation will always induce the hypnotic state in a degree sufficient to produce local anæsthesia in the part about to be amputated or operated upon.

We have now seen how slight a degree of hypnosis is required to render a subject amenable to control by suggestion. We have seen that the subject, even in the "waking condition," may be so completely anæsthetized by suggestion as to bear without the slightest sensation a torture which "is normally absolutely unbearable." It is also well known to every intelligent student of hypnotism that persons in the hypnotic state are constantly amenable to control by suggestion. This, as has been remarked, is the fundamental law of hypnotism. It is a corollary of these propositions that, when a patient is about to undergo a surgical operation, he is invariably thrown into a partially hypnotic state, and that consequently all that is needed to insure a painless operation is a vigorous and an intelligent suggestion that he will feel no pain.

I cannot but be aware that this is a conclusion so radi-

cally at variance with all that has been written on the subject that credulity will be taxed and proofs demanded. I will therefore present a few of the many facts which might be cited in support of my hypothesis. An eye-witness, well known to me to be entirely trustworthy, relates the following:

“A boy in St. Louis had one of his legs crushed in a street-car accident, and amputation became necessary. A local hypnotist undertook to hypnotize the patient, but failed to produce anything approaching sleep. In making the attempt, however, he strongly suggested anæsthesia. When it became apparent that the boy could not be put to sleep, the surgeon proceeded with the operation without administering anæsthetics; and, to the surprise of every one present, the hypnotist included, the boy felt not the slightest pain, and conversed coolly and cheerfully during the whole operation.”

In this case the boy knew nothing of hypnotism or its expected effect upon him, save that it would secure immunity from pain, and he believed that the mysterious passes were all that were required.

A prominent Washington physician relates the following, not of his own experience, but the facts of which he verified beyond doubt:

“A country fiddler had a bad leg which it became necessary to amputate. The surgeon came at the appointed time, prepared with an anæsthetic, which he was about to administer. The patient refused to take it, however, and insisted upon having his fiddle brought to him, saying: ‘Just give me my old fiddle. I have always fiddled my pains away, and I can do it now.’ The fiddle was brought and he played during the whole operation, and declared that he felt no pain whatever.”

It will be observed that this case illustrates very clearly the fact that auto-suggestion is as potent a factor in hypnotism as suggestion by another.

Another case of auto-suggestion was related by the same physician:

"The patient had been a sufferer for many years from a disease of the knee-cap. The skill of the medical profession had been taxed to the utmost limit in a vain effort to mitigate his sufferings, and finally it was decided that amputation was necessary. It was proposed to administer chloroform, but the patient refused. 'I have suffered so much misery from the thing,' said he, 'that I am determined to be an eye-witness to my own deliverance. I am sure it will feel good to have it removed.' The operation was proceeded with, and the patient declared that the sensation was actually pleasurable, and his actions verified his statement."

A lady of my acquaintance informs me that she possesses the power to prevent all pain when having her own teeth drawn, or when having them filled, by "treating herself" mentally, after the manner of the "Christian Scientists." A case of effective auto-suggestion, pure and simple.¹

A few years ago an itinerant lecturer (subject not now remembered) was in the habit of closing his evening's entertainment by offering to pull teeth, "without pay, pain, or anæsthetics." To inspire confidence and make it a possible object, he offered to give twenty dol-

¹ Since the manuscript of this paper was forwarded to the publishers I have received a letter from a captain in the British army, whose name I do not now feel at liberty to use, detailing an experiment which he personally made. He knew nothing, at the time, of my theories on the subject beyond what he had read in *The Law of Psychic Phenomena*, but the result furnishes a striking illustration of the principle herein set forth. His wife had a bad tooth, and a dentist was consulted, who informed her that, as the nerve was bare, she would not be able to undergo the necessary operation without anæsthetics. This she refused to submit to, but fixed a time for the operation. When the time came her husband strongly suggested to her that she would feel no pain, and instructed her to hold the auto-suggestion in her own mind during the operation. The result is summed up in the captain's letter to me as follows: "Not only did she not suffer the slightest particle of pain, even when the dentist was working by the nerve, but she could not feel the *tooth* being operated on. And this is what caused the dentist's surprise. I worked by your plan of suggestion."

lars to any one who would submit to the operation and assert upon honor that any pain was felt. Two eye-witnesses of undoubted probity have informed me that they saw several teeth drawn under those conditions, and that each patient declared that it was a painless operation.

Surgeon-General Hammond, in a clinical lecture delivered at the New York Post-Graduate Medical School some years ago, referred to a hysterical patient of his who was so absolutely controllable by suggestion that a hallucination of any kind could be produced in her waking condition. He adds:

“I could at any time render this patient insensible to pain by simply telling her emphatically that all sense or feeling was abolished. I once opened a ‘bone felon’ on the index finger of her right hand, carrying the knife down to the bone and incising the periosteum without her being sensible of the slightest sensation, and without her being hypnotized in the sense that we give to the word. I merely told her decidedly that she would feel no pain, and she felt none.”

Those who have had a “bone felon” lanced will admit that this was a crucial test of anæsthesia.

It should not be forgotten in this connection that the same law applies with equal, or even greater, force to obstetrical cases. The writer has personal knowledge of several cases of painless childbirth where the suggestion of anæsthesia was given by professed “mental healers.” If a suggestion in this form is thus effective, how much more potent must be a suggestion made by one who is present and reinforced by such auxiliary manipulations as hypnotists know how to employ!

Many other cases might be cited, but space forbids. The salient point to be observed in all these cases is that they are illustrative of a universal principle or law

of nature; and that law is that the emotion of fear or of dread, as of death, or of a surgical operation, or of imminent parturition, will invariably throw the patient into the subjective condition; and that, in that condition, the subject is constantly amenable to control by suggestion. This appears to be a universal law, and it applies alike to animals as to mankind, modified by the different degrees of intelligence and the consequent facility for imparting a suggestion. It is well known that many animals can be readily hypnotized by seizure and forcible confinement for a short time, as was demonstrated as early as 1646 by Kircher's well-known experiment with a hen. Since then many other animals have been hypnotized by a similar means; and in some cases it has been demonstrated that a perfect state of analgesia is produced. Thus, Surgeon-General Hammond, whose reputation as an accurate scientific observer is international, has succeeded in hypnotizing frogs, by seizure, so profoundly that he was enabled to cut the animal open its whole length without its moving, or apparently experiencing the least sensation.¹ Dr. Hammond also succeeded in hypnotizing crabs to the extent of producing a state of perfect analgesia; and many other animals were hypnotized by him, both by seizure and by Braid's methods. A volume might be filled with illustrative incidents showing that animals and men are alike susceptible to hypnotization by exciting the emotion of fear or dread. One of the favorite methods of inducing hypnosis, employed by the late Professor Charcot, was by suddenly and unexpectedly sounding a gong near the patient's ears; or by flashing a Drummond light in his eyes.²

¹ *Nervous Derangement*, third edition, p. 20.

² *Animal Magnetism*, Binet and Féré.

I cannot more appropriately conclude this part of my theme than by calling attention to the well-known facts of the history of the Christian martyrs, and their alleged immunity from pain while undergoing the most horrible tortures. The following quotation from Dr. Charpignon¹ must suffice:

“Among the martyrs of Christianity many escaped pain through the ecstasy which came from the ardor of their faith, a phenomenon well known to their executioners, who increased their fury and improved their inventions for punishment. In the same way, at the time of the tortures of the Inquisition, certain individuals became insensible under the influence of their faith in the somniferous virtue of some talisman. Upon this point I will give the following passage, an extract from *Secrets merveilleux de la magie naturelle et cabalistique* (12mo, Lyons, 1629). ‘Some rascals trusted so strongly in the secrets they possessed to make themselves insensible to pain, that they voluntarily gave themselves up as prisoners, to cleanse themselves of certain sins. Some use certain words pronounced in a low voice, and others writings which they hide on some part of their body. The first one I recognized as using some sort of charm surprised us by his more than natural firmness, because after the first stretching of the rack, he seemed to sleep as quietly as if he had been in a good bed, without lamenting, complaining, or crying, and when the stretching was repeated two or three times, he still remained as motionless as a statue. This made us suspect that he was provided with some charm, and to resolve the doubt he was stripped as naked as his hand. Yet after a careful search nothing was found on him but a little piece of paper on which were the figures of the three kings, with these words on the other side: “Beautiful star which delivered the Magi from Herod’s persecution, deliver me from all torment.” This paper was stuffed in his left ear. Now, although the paper had been taken away from him, he still appeared insensible to the torture, because when it was applied he muttered words between his teeth which we could not hear, and as he persevered in his denials it was necessary to send him back to prison.’”

It will be obvious to the intelligent reader that the emotion of fear induced the hypnotic state, and that the

¹ *Études sur la médecine animique et vitaliste.*

talisman operated as a suggestion which produced a state of perfect analgesia.

That these facts have some significance goes without saying. That they point to some universal law of nature is self-evident. That that law, when once discovered, will be found to be for the highest good of mankind is a proposition sanctioned by the results of every discovery yet made in the realm of natural law.

Nature is ever kind to the victim of the inevitable. The truth of this proposition is exemplified in the universal immunity from suffering of all animate creatures during the process of dissolution. We have seen that the process by which this immunity is secured is by the spontaneous induction of the hypnotic condition at the approach of death. We have also seen that the same hypnotic condition is spontaneously induced when a surgical operation becomes inevitable. Have we not a right to infer that Nature has provided for the same immunity from suffering during a surgical operation, or during parturition, as it has for those who are called upon to undergo the process of dissolution? The conditions are the same; but the suggestion has been different, owing to our ignorance of the law. We have been taught that death "eases us of all (bodily) pain"; and it does. The suggestion in that case is on the side of immunity; and the result is that, no matter what form death may assume, the victim dies "without pain and without regret." On the other hand, our daily experience constitutes a suggestion that cutting and mutilation cause pain. That suggestion, in the absence of a contrary one, is carried over into the subjective condition which precedes and accompanies a surgical operation, and the patient suffers accordingly. Again, the curse pronounced upon our grandmother Eve op-

erates as an ever-present suggestion to the mothers of Christendom that painful parturition is an inalienable inheritance; whereas, among other races, this inevitable crisis in every normal woman's life is attended with comparatively little pain or inconvenience. Now, is it not obvious that all we have to do in order to overcome the suggestion conveyed by our ordinary normal experience is to offer to the *already hypnotized* patient a counter-suggestion to the effect that no pain will be felt during the operation? The patient is in that condition which renders all mankind amenable to control by suggestion; and the suggestion of immunity from pain operates on the lines of nature's least resistance.

One word as to the practical method of applying these principles. It is obvious that, in order to overcome the suggestion embraced in the daily normal experience of mankind, the counter-suggestion should be made in some way that will strongly appeal to the imagination of the patient. It should be made strongly, vigorously, positively, but with due regard to the beliefs, the prejudices, and the general idiosyncrasies of the individual. As in other cases where suggestion is employed, success depends upon the manner in which it is enforced. Hypnotists will readily understand my meaning, and those who are not hypnotists can readily acquire the necessary information by consulting any modern standard work of the Nancy school. One thing, however, should never be lost sight of, and that is the necessity of impressing upon the mind of the patient the fact that *a profound hypnotic sleep is not an essential prerequisite to the successful employment of hypnotism as an anæsthetic in surgery.*

XI

THE DANGER LINES IN HYPNOTISM

THERE are two danger lines in hypnotism. One pertains to the moral well-being of the subject, and the other to his physical and mental health.

Two questions are thus presented for consideration. The first is, how far and under what conditions may hypnotism be employed for the promotion of vice, immorality, and crime? And the second is, under what conditions may hypnotism become a source of danger to the physical and mental health of the subject?

The first of these questions has been so thoroughly discussed of late, under the title of *Hypnotism and Crime*, that there is little to be said that would be new to the reader. Indeed, so persistently has this question been discussed, and so ably has it been obscured by the newspaper press, that the public is fast settling down into the belief that two monstrous entities have recently sprung into existence, formed a copartnership, and are now engaged in a diabolical business under the firm name and style of *Hypnotism and Crime*. I will not attempt to disabuse the public mind of the favorite idea, but will content myself with pointing out to the professional reader the principal source of error which besets those who hold that the two, if not necessarily insepa-

rable, belong to the same category of offences against the peace and dignity of the state.

The truth is that the whole difficulty arises from the inability of a certain class of persons to take more than one step in the process of reasoning. Thus, when such reasoners have once been able to master the broad idea that "the hypnotized subject is constantly amenable to control by the power of suggestion," they at once jump to the conclusion that said subject, in the hands of the hypnotist, is as clay in the hands of the potter; that he is a mere automaton, without volition of his own; that he has surrendered his personality and his will to the keeping of the operator, and is, consequently, irresistibly compelled to obey the slightest injunction of his custodian, even to the extent of perpetrating high crimes and misdemeanors. Such reasoners, when informed that gravitation is a universal force, and that the sun attracts the earth, would affirm, with equal confidence and reason, that the latter must inevitably plunge into the former and be consumed. They would forget, or be unable to comprehend, the further fact that other planets attract the earth, and thus, by virtue of the universality of the law of gravitation, counter forces exert their ever-present influence upon the earth and upon the whole planetary system, in such a way as forever to prevent the anticipated "wreck of matter and crush of worlds."

Strange as it may seem to those persons, the hypnotic subject is hedged about and protected by counter forces that operate to preserve his moral equilibrium in ways that are as nearly analogous to those I have used as an illustration as a moral force can be to a physical force. In other words, the suggestions of the operator to the hypnotized subject may be, and are, constantly counter-

balanced by other suggestions. This is a fact which the average student of theoretical hypnotism is slow to learn; and yet it is the most important fact in the whole science. These counter-suggestions, as I have pointed out elsewhere,¹ may arise from the instinct of self-preservation, education, experience, religion, principles of moral rectitude, or even from a sense of personal dignity. These I have classified under the term "auto-suggestions."

I do not undertake to say that suggestions arising from either one of the sources named, or from all of them combined, would in all cases afford protection to a hypnotized subject against suggestions of a criminal character. In other words, I do not deny the proposition that it is possible, under certain conditions, for a hypnotized subject to be induced by a criminal hypnotist to commit a crime; and I know of no one who does deny it.

This being conceded, it becomes important to locate the danger line, or rather the line of safety, — the line beyond which neither an immoral nor a criminal suggestion can ever prevail.

That line is clearly defined by Conscience, — that sleepless sentinel on the watchtower of the human soul, which guards and protects each one who is endowed with that faculty from the assaults of sin and shame.

By this I do not mean that quality of "conscience" which "makes cowards of us all," which consists of, or is manifested in, fear of the consequences of wrongdoing. By "conscience" I mean "that power or faculty in man," whether it be connate with him or the result of moral education or training, "by which he distinguishes

¹ See *The Law of Psychic Phenomena*.

between right and wrong in conduct and character, and which imperatively commands and obligates him to do the right and abstain from doing the wrong."¹

It is obvious that, given a criminal hypnotist and a weak and criminal subject, no one of the other sources of auto-suggestion which I have named would of necessity protect the latter against the determined and persistent oral suggestions of the former. Thus the "instinct of self-preservation," which is ordinarily the source of one of the strongest auto-suggestions, is not always adequate, since it is well known that men, in an apparently normal condition, often place themselves in imminent and deadly peril in pursuit of a criminal object. "Education and experience" are plainly inadequate, for it is well known that many of the most notorious criminals have not been lacking in these advantages. "Religion," *per se*, is notoriously inadequate as a means of protection, since it is well known that the brigands of Italy are as devout as they are devilish. "A sense of personal dignity" constitutes a strong auto-suggestion against doing that which would excite ridicule; but obviously it would only operate indirectly against criminal suggestion. "Principles of moral rectitude," however, stand upon a somewhat different footing, inasmuch as they are, if genuine, but another name for conscience. But unfortunately there are many men who are imbued with "principles of moral rectitude" "for revenue only"; who are honest only because honesty is the best policy; who take the law for their guide in all business transactions. Such men are seldom either truly honest men or good citizens. Plainly their "principles," although they may constitute the best

¹ *Standard Dictionary.*

available substitute for a conscience, would of themselves furnish no adequate or certain protection against criminal suggestion.

Let me not be misunderstood. I do not mean to say that auto-suggestions arising from the sources named would afford no protection against the suggestions of a criminal hypnotist. I merely say that they may not afford adequate protection in the absence of conscience. That each constitutes a powerful bulwark against the assaults of a criminal hypnotist, I most unhesitatingly affirm. They are constantly alert, jointly and severally, for the protection of the individual; the instinct of self-preservation, in the absence of conscience, being always the dominating factor. But when a man has risen in the scale of humanity and civilization to the dignity of being in possession of that power or faculty which "imperatively commands and obligates him to do the right and abstain from doing the wrong," he is entrenched within a citadel against which no power of criminal suggestion can prevail.

The simple rule is that when two opposing suggestions are presented to the subjective mind of a hypnotized subject, the stronger must prevail. This is a rule which admits of no exception or variation. It follows that when the plea is offered in a court of justice, in extenuation of a criminal or immoral act, that the subject was coerced by criminal suggestion, it amounts to a general confession that his immoral or criminal desire is stronger than all other considerations combined; and it amounts to a specific proclamation of the fact that the alleged victim is devoid of conscientious scruples regarding the particular crime which he has committed.

From the nature of things it can never be specifically known how many, or what character of adverse auto-suggestions may have been overcome by a successful criminal suggestion; but one thing is always certain, and that is that in reference to the particular crime, the guilty subject is devoid of conscientious scruples.

Conscience not only marks the line between the realms of danger and safety in the hypnotized subject, but it also defines the limit of control which the objective mind normally exercises over the subjective mind. That is to say, in the normal man the objective intellect exercises supreme control over the dual mental organism, up to a certain limit. That limit, again, is defined by conscience. When, in the progress of mental and moral evolution, man reaches that stage of development — that moral altitude — where conscience becomes an attribute of the soul, the love of the right and hatred of the wrong become an emotion of such supreme potentiality that nothing, not even the love of life, nor the fear of the tortures of the Inquisition, can prevail against it. This emotion, of course, varies in strength and intensity with each individual, in accordance with his education and moral development; and it may be perverted, even to the extent of causing insanity. The point is that it is an emotion, and therefore belongs to the subjective mind; and in the normal man, whose environment has been favorable, and whose training and education have been along the lines of truth and right, and in harmony with reason, this emotion becomes the dominant characteristic of his mental organism. It is then that the subjective mind, rightfully and normally, assumes the ascendancy, conscience becomes instinctive, the perception of the eternal principles of right and

wrong becomes intuitive; and the immortal part of man, drawing inspiration from the Eternal Source of Truth and Right, becomes an "inward monitor" whose sleepless vigilance guards and protects him and repels every assault upon the integrity of his character.

I am not unmindful of the fact, as I have before intimated, that conscience, like every other human emotion or faculty, may be perverted, and its forces expended in wrong directions. Witness the great army of cranks who infest every civilized community. No more conscientious men or women exist than they whose zeal in the cause of "reform" has led them into the belief that whatever is, is wrong. Many of them, had they the power, would crucify, or exterminate with fire and sword, all who differ with them in opinion. No nobler or purer race existed in their day and generation than those of whom history records the fact that they would suffer martyrdom or expatriation for conscience' sake, but who, in turn, would apply the fagot and the torch to those whose views were not in harmony with their own.

I need not dwell upon this branch of the subject, however, for it does not pertain directly to the question under consideration. It is mentioned here, first, for the purpose of showing that the noblest attribute of civilized man may be perverted by an unfortunate environment or the suggestions embraced in a false education; and, second, for the purpose of exhibiting in a stronger light the fact that conscience, when once aroused, is the dominating force in the whole character of man. The fact that it may be perverted, however, does not militate against or modify the proposition I have advanced; for it does not follow that because a man would wish to see exterminated all whose views on social or religious

questions do not accord with his, he would commit a private murder, rape, or arson in obedience to hypnotic suggestion, or of his own volition. Only those whose perversions have reached the stage of insanity could be thus influenced.

The proposition, therefore, still holds good that the auto-suggestions embraced in conscientious scruples against the commission of immoral or criminal acts are more potent than any possible suggestion of a criminal character.

The next question is, under what conditions may hypnotism become a source of danger to physical and mental health?

Students of theoretical hypnotism are about equally divided into two classes, namely: 1, those who hold that hypnotism can never be otherwise than beneficial to the subject; and, 2, those who can see untold evils environing a hypnotized person and threatening him with nervous wreck and imbecility. As usual, the truth lies somewhere about half way between the two extremes.

Hypnotism may become an unmitigated evil to the subject, or it may result in unqualified benefit to him. Between the two extremes there are all grades and degrees of good results, as well as of evil, to the hypnotic subject.

This being true, it is of the highest importance to all concerned to locate the danger line; for obviously there must be some broad, fundamental principle underlying the subject matter which has not yet been discovered or definitely formulated, and which will account for the wide range of difference of opinion among experts of apparently equal skill and capacity for correct observation.

It is true that in this connection we often hear hypnotists speak of degrees of skill in the induction of hypnosis; and we infer from their observations that they regard skill in that line as the essential element of success in the production of good results; but, whilst the importance of skill and experience is not to be underrated, it is nevertheless true that often the most skilful and experienced hypnotist will leave his subject a nervous wreck. I admit that this is rare, but it is possible, nevertheless. It is not, therefore, skill alone that defines the danger line.

I have not space, however, to discuss the various theories which have been advanced to account for the fact under consideration; but will proceed to suggest, tentatively, a hypothesis which may throw some light upon the subject and induce others to consider the facts, experimentally, from that standpoint.

It seems to me that the chief difficulty arises from not fully comprehending the true import of the law of suggestion. Like every other law of nature, it is simple; but that quality lies largely in the simplicity of the terms in which it can be formulated. The law itself embraces many complications, which, if left out of consideration in any given case, will involve the student in a maze of apparent contradictions.

The subjective mind, while it is always amenable to control by the power of suggestion, and while it often accepts a false suggestion with the same readiness with which it accepts a true one, is, nevertheless, normally a lover of truth. It may be, and often is, perverted in the extreme by a lifelong series of false suggestions; but normally it loves the truth, and it has, moreover, an intuitive perception of truth when it is presented.

Now, there is no fact better known to hypnotists than that when two antagonistic suggestions are made to a hypnotized subject, even though the subject matter of the suggestions may be of trivial character, it invariably produces the most unmistakable mental distress; and, if the suggestions are persisted in, the subject often awakens to normal consciousness suffering from a severe nervous shock. Reverting again to the subject of hypnotism and crime, it is well known to hypnotists that a criminal suggestion, acting upon the principle mentioned above, will often awaken a subject; and when this occurs, it is invariably accompanied by a violent shock to the nervous system. Dr. Cocke, of Boston, reports a laboratory case in which a criminal suggestion threw the subject into a violent fit of hysterics.¹ I have myself seen a subject thrown into a state of hystero-catalepsy by a persistent suggestion (insisted upon at the instance of a fool) that she perform an act which, in her normal condition, she regarded as sacrilegious.

Every one who has witnessed even the common stage experiments knows how vigorously, at first, a suggestion will be resisted when it is contrary to an obvious and well-known fact. For instance, a suggestion that the subject is some one else will be instantaneously resisted, and sometimes with stubborn persistence for a short period, the strength of the resistance varying with the character of the personality suggested. But, when conscience, or some other powerful adverse motive is not involved, if the suggestion is strongly enforced the subject will yield to it and carry it to its legitimate

¹ *Hypnotism* (Arena Pub. Co.). See article, *Hypnotism in its Relations to Criminal Jurisprudence*.

conclusion with marvellous fidelity to the logic of the situation.

Again, common observation will bear me out in the assertion that subjects who have been long and continuously employed on the stage for the purposes of exhibition invariably become nervous wrecks, especially if skilful care has not been persistently exercised in restoring the normal tone to their nervous organizations. It is, indeed, with this class of subjects that the evils of hypnotism have been made manifest to the general public as well as to professional observers. In this class I mean to include all subjects who have been continuously used for purposes of amusement, whether on the public stage or in the private drawing-room. The "amusement" which hypnotism affords is necessarily due to the antics which the subject performs in response to false or ridiculous suggestions, and these are often of a painful character. The depth of the injury inflicted upon the mind of the subject is measured partly by the character of the suggestions, and partly by the frequency and suddenness of the changes from one false suggestion to another of an opposite character; and it is true, unfortunately, that many stage hypnotists, ignorant of the principle involved, and anxious to amuse their audiences and to demonstrate the potency of suggestion, inflict incalculable injury upon their subjects by suddenly and frequently changing the character of their suggestions from one extreme to another. It may be amusing, and possibly instructive, but the subject is a martyr to the cause of popular education in hypnotism. Of course the evil can be minimized by making easy and natural transitions from one hallucination to another; but the average stage hypnotist is either igno-

rant of the principle involved, or is careless of the well-being of his subjects.

And it may be remarked here that much of the popular prejudice against hypnotism arises from witnessing such performances. All that the public is permitted to see is a crowd of subjects, usually of limited intelligence and vain and egotistic to the last degree, put through a series of antics, sometimes amusing, often painful, and occasionally disgusting; and the popular conclusion is that what they have witnessed is the sum total of hypnotism. The more thoughtful spectator of average intelligence will inevitably come to two conclusions. One is that if such performances are necessary in order to avail oneself of the benefits of hypnotism, he wants none of it. The other is that if suggestion is such a powerful agent as to cause a subject to lose his identity, forget his name, or imagine himself to be a dog, with all that the name implies, he can just as easily be persuaded to slaughter his grandmother. In any event he is sure to come to the conclusion that the dangers of hypnotism are very prominently exemplified by such practices. On the other hand, the proposition that hypnotism, or its chief handmaiden, suggestion, has proved to be an unalloyed blessing to millions of the human race, cannot be successfully controverted. No intelligent observer who has made an honest and unprejudiced investigation of the subject will deny its value as a therapeutic agent or gainsay the fact that it has been the means of restoration to health of untold numbers of otherwise incurable sufferers from physical and mental maladies. Its value as an anæsthetic in surgery has been demonstrated by the profession in many notable instances; and it is thought, as I have

pointed out elsewhere, that when its laws are better understood, it will be found to be an agent of universal application for the inhibition of pain in surgical operations. Its value as a means for the eradication of habits of drunkenness, as well as of many other habits equally destructive to health and reason, no one who has given the slightest attention to the subject will seriously question. Its availability as an auxiliary to the usual processes of education is rapidly becoming known throughout the world; and so is its value as a means of training children to correct habits of mind and body, and, above all, of eradicating from the human mind the tendency to immorality, vice, and crime.

It is a noteworthy fact that from those who have employed hypnotism or hypnotic suggestion for the beneficent purposes I have just named, and for those purposes only, we hear no complaint of the evil effects of that agent.

It will be apparent to the intelligent reader by this time, that the dividing line between the realms of danger and of safety in hypnotism is clearly defined by Truth.

Truth follows along the lines of least resistance in the intellectual realm, as the physical forces of nature do in the material world; for the universe is the embodiment of truth, and hence every truth is consistent and in harmony with every other. Falsehood, on the other hand, follows the lines of greatest resistance, for it is in harmony with nothing; and it finds its strongest antagonism in that innate love of verity which is inherent in the unperverted human soul.

And so it happens that when therapeutic suggestions are made, they find a ready acceptance; for health is

normal and disease is abnormal. The same is true of every suggestion in harmony with, and in promotion of, the well-being of the normal subjects, morally, intellectually, or physically.

The only question, then, which remains for consideration in this immediate connection is whether hypnotic sleep, *per se*, produces any deleterious effect upon the human system. The obvious answer is that inasmuch as hypnotic sleep, undisturbed by unpleasant hallucinations arising from false suggestions, is identical with natural sleep, it follows that the hypnotized subject is in no more danger of untoward results than is the man who "wraps the drapery of his couch about him and lies down to pleasant dreams." Moreover, the recuperative effects are the same as in natural sleep, though ordinarily greater in degree, for the reason that hypnotic sleep is usually accompanied by therapeutic suggestions.

It is not, therefore, the method of inducing the condition that constitutes the essential difference between natural and hypnotic sleep. That difference is wholly due to the suggestions which accompany it. Hypnotic sleep, unaccompanied by suggestions as to its duration or object, merges into natural sleep so perfectly that the closest observer cannot detect the time when the transition occurs. When it is attended by therapeutic suggestions, or others of a pleasant character and in harmony with truth, the result is always beneficent, for the simple reason that no antagonism is provoked.

A false suggestion, on the other hand, invariably produces a nervous shock of greater or less intensity in proportion to its character, and the consequent amount of resistance it encounters. This occurs on precisely the

same principle and for the same reason that a criminal suggestion will produce that result. A criminal suggestion provokes an antagonistic auto-suggestion of an intensity proportioned to the subject's character for moral rectitude. A false suggestion, in like manner, provokes an adverse auto-suggestion of varying intensity proportioned to the subject's education, experience, and inherent love of truth. In either case a shock, of greater or less severity, is produced. The shock may be light, and doubtless is, in many cases, especially in stage exhibitions; but the effects are cumulative, and when a series of such experiences is long continued there can be but one result,—a shattered nervous organization.

From the foregoing facts four very important conclusions are inevitable:

1. That the hypnotized subject is not the unresisting automaton that has been pictured by popular imagination; that, on the contrary, he is hedged about and protected from evil influences in exact proportion to his deserts, and that if crime is ever a possible result of hypnotic suggestion, it is only so with those who, in their normal state, could be more easily influenced to commit a crime than they could in a condition of hypnosis.

2. That all the manifold benefits of hypnotism can be obtained by perfectly normal means, without the necessity of producing an unpleasant hallucination with its consequent shock to the nervous system, by simple adherence to truth when making a suggestion for any beneficent purpose whatever.

3. That the laws of hypnotism constitute no exception to the rule that the forces of nature, when once

understood and intelligently utilized, are always promotive of the highest good to mankind.

4. That hypnotism is no exception to the rule that in all the relations of life the boundary lines between the realms of good and evil, between danger and safety, are clearly defined by conscience and truth.

XII

A PSYCHOPATHIC STUDY

IT is axiomatic that any belief which is alleged to be founded upon observable phenomena is entitled to respectful consideration and scientific examination. I hazard nothing in saying that "Christian Science," so called, has abundantly demonstrated its right to both. Its votaries, claiming divine power, have healed the sick by hundreds of thousands; yet they have been recognized by the medical profession only by bitter denunciation. Claiming an intimate acquaintance with, and often verbal inspiration from, the Divine Father, they have poured the balm of religious consolation into many a stricken heart, only to be repaid from the pulpit by solemn objurgations and strenuous anathemas. They have gone into the highways and by-ways, and proclaimed their divine mission from the housetops, only to be answered by the jeers and ridicule of the ungodly. And, notwithstanding their solemn asseverations that they teach the only science worth knowing, Science itself has assumed a lofty mien and passed by on the other side.

Perhaps it was natural for the medical profession to indulge in a noble rage, owing to its cautious conservatism,—that is to say, its ancient prejudice against everything new that claims to heal the sick. The clergy must be expected to indulge in hostile criticism, because

the Christianity of Christian Science is so very different from the Christianity of Christ. As to the unseemly levity of the irreverent laity, — its tendency to laugh at what, to its uncultured mind, seems ridiculous, — it is too well known to require comment or serious animadversion. But the attitude of Science is indefensible. It has no right to ignore facts, to indulge in prejudices, or to neglect to explain phenomena of such obvious importance as that which lends to Christian Science its air of supernatural mystery, and invests it with sociological, as well as pathological, importance.

The most that I can do within the space at my command is to outline the salient psychopathic features of the phenomena, and to suggest thereby the proper line of scientific examination, relegating to the professional alienist the exhaustive study of that which is so obviously within his domain.

The subject naturally arranges itself under two heads, namely: (1) the psychopathic condition of the founder of the sect; and (2) the psychopathic condition of her followers.

To those who are acquainted with the fundamental principles of the new psychology it is obvious that the founder of the sect known as "Christian Scientists" is an object of commiseration rather than of denunciation. She is simply a victim of self-delusion, arising from an ignorance of the fundamental law of psychic activity. The law is briefly this:

Man is endowed with a dual mind, or two states of consciousness. For convenience of treatment they have been designated, one as the objective, and the other as the subjective mind. The former is the mind of ordinary waking consciousness. The latter is the intelligence

which is manifested in dreams, trance, or trance-like conditions, when the objective mind is inhibited, as in sleep, or in somnambulism, spontaneous or induced. The salient feature of differentiation which bears upon the case under consideration is that the objective mind is capable of independently conducting the process of inductive reasoning; whereas the subjective mind is devoid of that power. That intelligence is dominated by the law of suggestion. In other words, it takes its premises from an extraneous source; and it reasons deductively from those premises or suggestions. The latter may be conveyed to the subjective mind in many ways, prominent among which are the words or affirmations of another, as in hypnotism; or they may be imparted by means of the ordinary processes of education, as in training children; or the objective mind of an individual may convey dominating suggestions to his own subjective mind. These are called "auto-suggestions." If truthful, they are beneficent. If false, they may result in insanity, as in monomania. Any form of false suggestion, indeed, may result in insanity, if it is persistently dwelt upon to the exclusion of the countervailing suggestions of truth. When this occurs, the subjective mind is in control; that is, it dominates for the time being the dual mental organism, truth is subordinated, and reason is dethroned.

The salient characteristic, however, of the subjective mind which bears directly upon the case in hand, is its prodigious faculty for reasoning deductively from given premises to legitimate conclusions. It is akin to intuition, and it is always the concomitant of the latter faculty. Its manifestations, indeed, are often confounded with intuition; and it is this circumstance that gives rise to so many claims for the superior "intuitions"

of women. But their so-called intuitions, when analyzed, are often found to be mere deductions from premises that may or may not be true. The point is that the deductions of the subjective mind are always legitimate and logical, whether the premises are true or false. If true, the result is often a work of genius. But if the premise is false, the work soon reveals the fact; for truth cannot be evolved from a falsehood, if the deductions are legitimate. That is to say, a false premise carried to its legitimate conclusion always ends in an absurdity. If the author is mentally balanced, he will detect the absurdity himself and abandon the premise as untenable; especially if he is well endowed with that indispensable quality of a well-balanced mind — a fine appreciation of humor — a keen sense of the ridiculous.

Unfortunately for the poor psychic whose subjective mind is in control, and who is dominated by a false suggestion, he has no sense of humor, and is intellectually impervious to ridicule. Humor is not a faculty of the subjective mind. True humor is a concomitant of reason — a criterion of induction. It weighs facts and principles in its own balance, detects the incongruous elements of thought, and resolves them in its own alembic. In other words, the legitimate function of humor is to separate incongruous ideas and exhibit them in violent contrast. Its legitimate object is the ascertainment of truth, on the principle that no truth is inconsistent with any other truth in the Universe of God. Thus Mark Twain, in his humorous article relating to Christian Science and its founder's book, has more clearly and effectively shown the fallacies of that work, and demonstrated its utterly unscientific character, than

have all the arguments of others combined. The fact is, the book does not call for serious argument, much less for denunciation, or vituperation. Its only legitimate place is in the library of the alienist. Its author is a psychic, and the book is purely and simply a psychical phenomenon. As such it deserves serious consideration, for it stands unique as an illustration, on an extensive scale, of the vagaries of psychical "mentation" when the subjective mind of the patient is dominated by false suggestion, and reason is in abeyance. A few words will make the foregoing clear to the mind of the reader.

The "fundamental principle" upon which Christian Science is based, as set forth in its founder's book, is that "there is no such thing as matter." It will at once be seen that such a proposition affords the best possible illustration of the mental condition of its author — that is to say, of the dominance of a false suggestion, and the total inhibition of the inductive faculties or powers. Each is shown in the author's total obliviousness of all the facts of human experience; for if man knows anything he knows that the material universe is a stupendous reality.

Now comes in the deductive logic of the psychic: dominated by the fundamental postulate — the non-existence of the material universe — and realizing that, in all human probability, something exists, her deduction is that — "God is all." This is not an illogical deduction from the premise; but whether it is demonstrated to be true, as the author thinks it is, by the fact that it means practically the same thing when read backwards, is a question which we will not stop to consider. This is followed by two other propositions, namely,

"God is good" and "Good is mind." These are also held to be demonstrated by the fact that they can be read backwards without destroying their "scientific" validity; although, in view of the example we are considering, it would seem that the latter proposition, read backwards, should be stated with some qualifications. At any rate, these propositions cannot be said to be illogical deductions from the premise, although they appear to be merely incidental statements, not essential to the argument.

But in her next proposition she resumes her logical attitude and restates the premise and the conclusion in the same sentence, thus: "God, Spirit, being all, nothing is matter."

This is another of her reversible, self-demonstrating propositions, and who shall say that the conclusion is not a logical deduction from the premise?

She has many other propositions of the invertible order which she imagines are mathematically demonstrated by the fact that they can be inverted. No one but an alienist, familiar with the phenomena of paranoia, would believe this statement without proof. Here is what she says:

"The metaphysics of Christian Science, like the rules of mathematics, prove the rule by inversion. For example, there is no pain in Truth, and no truth in pain; no nerve in mind, and no mind in nerve; no matter in mind, and no mind in matter; no matter in Life, and no life in matter; no matter in Good, and no good in matter."

Leaving out of consideration the obvious absurdity of assuming to demonstrate a proposition in philosophy by the mathematical process of inversion, the fact remains that each one is logically deducible from the

original postulate. They are corollaries of the proposition that there is no such thing as matter.

Of course the unfortunate author is unable to detect the monstrous absurdity of her original postulate, and, consequently she shrinks not from the conclusions necessarily derivable therefrom. This is shown throughout the whole book. Hence she does not hesitate to declare that there are no such things possible as evil, sin, pain, sickness, or death. How could there be, if there is no such thing as matter—if all is God, and God is all?

Thus far, then, the author is logical. But it is the logic of the subjective mind when dominated by a false suggestion—a monstrous absurdity. Not the faintest glimmer of the light of inductive reasoning illumines the dark and dismal picture. Not one fact of human experience is considered, nor one law of nature consulted.

The author had smooth sailing so long as she confined herself to laying down general principles. But she was intent on writing a book designed to apply her "principles" to the affairs of practical every-day life and human experience. It was then that the logical trouble began. She undertook to tell how to heal the sick when, according to her theory, nobody was, or could possibly be, sick; because God is all, and God cannot be sick. Moreover, there is no such thing as matter, and, consequently, nobody has a body to furnish a basis of sickness or of pain. Besides, matter cannot feel pain, first, because there is no such thing as matter, and secondly, because there is no such thing as pain. Sin cannot exist, because God is good, and God is all. Death is impossible (1) because nothing but matter

can die, and there is no such thing as matter; (2) because God is all, and God cannot die.

These and a thousand other contradictions and absurdities fill the whole book. The obvious reason is that, when the author comes to treat of the facts of human experience, she must necessarily employ the terms of human experience; and since her theory recognizes the existence of no such facts, the result is necessarily a monstrous hodge-podge of monumental absurdities. Such a conflict between theory and fact could have no other result, in the nature of things, especially when the theory is constantly reiterated in connection with the facts.

Nothing more need be said of the book itself. It must be read to be appreciated. To the student of neuropsychopathy it affords an abundant supply of illustrative material. To the student of the new psychology it is invaluable as illustrating the distinctive powers and limitations of the two minds or states of consciousness. To the non-professional reader it furnishes a frightful example of the danger to be apprehended from allowing the subjective mind to usurp control over the dual mental organism.

I cannot dismiss this branch of the subject, however, without uttering a protest against the constant iteration, on the part of the enemies of the unfortunate lady, of the charge of plagiarism. The story is that she copied the manuscript of the late Dr. Quinby and published it as her own after his death. The charge is, to use no harsher term, simply infamous; especially since Dr. Quinby is no longer here to defend his own reputation. Besides, the lady herself denies it most emphatically. On the contrary, she says that the book was

divinely inspired; and she unquestionably believes it. Her followers also most fervently believe it, and hence their veneration for the book as of equal authority with the Bible. She also intimates that she was the "woman clothed with the Sun," who is mentioned in the Apocalypse; and good Christian Scientists, including honorable women not a few, fervently believe that the "little book," which the "mighty strong angel" commanded St. John to eat, was, in point of "scientific" fact, the very book now under consideration. This, it is needless to say, has caused the enemy to blaspheme; and the mildest form of his blasphemy consists in the admission that the indigestible character of the contents of the book, together with the subsequent experiences of the seer, lend an air of plausibility to the supposition.

It has also been claimed that the idea of the non-existence of matter was not original with the author. That may or may not be true without impairing the validity of her claim to originality in her method of treatment. Bishop Berkeley would be the first to defend her against the charge of plagiarizing from himself; and he would probably stand aghast at the result of carrying his pet theory to its legitimate conclusions in dealing with the facts of human experience. It is to the last degree improbable that she ever saw or heard of the writings of Bishop Berkeley. Certainly the philosophical arguments by which he sought to sustain his theory are entirely absent from her work.

The next branch of the subject relates to the psychopathic condition of her followers. Indeed, the only justification for discussing the subject outside the journals of psychiatry, consists in the facts that the sect has gathered its forces from all ranks of society, that it num-

bers its followers by hundreds of thousands, and that its delusions threaten to become epidemic and to fill our insane asylums. Not that all who call themselves Christian Scientists are either mattoids or paranoiacs, or that they are all in imminent danger of losing their mental balance; those charges are obviously the gross exaggerations of sectarian prejudice or of professional jealousy. On the contrary, there are vast numbers who are rated as Christian Scientists who know little of, and care less for, the theories of the founder; and therein lies their safety. It is only those who undertake seriously to master the theory and to harmonize it with the facts of experience that are in imminent danger of mental alienation; and even they may escape the serious phases of paranoia if they have not acquired, or are not congenitally afflicted with, a neuropsychopathic tendency. Unfortunately this tendency is alarmingly prevalent in modern society of all grades, as the records of the lunatic asylums testify, to say nothing of the numerous comparatively harmless mattoids who are still allowed to run at large.

Among the numerous causes which unite to swell the ranks of Christian Science there is one which seems to be of almost universal application, and that is the astounding lack of the power of logical induction in primitive minds. Thus, the founder's book iterates and reiterates that her theories are demonstrated by facts of every-day experience. What facts? Why, the fact that people who believe in her theories are healed by other people who believe in her theories; and this is reënforced by the scripture quotation, "By their fruits ye shall know them." That is the sum total of the inductive logic of Christian Science. I have said that it

is the logic of primitive minds. Thus the American savage, whose theory of disease is that the patient is beset by evil spirits, effects his cures by frightening away said evil spirits by means of hideous noises and a diabolical make-up. The best authorities tell us that the Indian medicine man's record of cures equals that of the M.D.'s or the C.S.D.'s. Doubtless the savage regards this as demonstrative of the correctness of his theory; and the Christian Science logician must admit it, for "by their fruits ye shall know them."

The same remarks apply alike to the voodoo doctor's theory and to that of the fetish worshipper, who simply attaches his fetish to the patient; for they also cure disease. Are the theories of Voodooism and Fetishism "demonstrated to be true" by their facts of successful healing? Certainly, if the "inductive" logic of Christian Science is valid. "By their fruits ye shall know them" is just as valid for Fetishism as it is for Christian Science, but it requires only the faintest glimmer of the light of reason to enable even the wayfaring man to see that it has no valid application in either case. And yet this is the sum total of the "inductions" of Christian Science. That is to say, the fact of healing is the only fact adduced to prove the theory that there was nothing to heal. Every other fact in nature is systematically denied.

And this is the logic which has won the great bulk of its proselytes to Christian Science. And these are the phenomena alluded to in the beginning when I said that Christian Science deserved a scientific investigation. I also alluded to the religious consolation which many have derived from their connection with the organization. Far be it from me to seek to deprive any stricken

soul of the comfort and consolation derivable from religious emotion, by whatsoever means it may have been evoked. It is mentioned here only as one of the many causes which contribute to the success of the Christian Science organization. It is, perhaps, natural for the superficial mind to associate religion and mental healing, owing to the sacred character of the Great Healer. Yet he did not proclaim it as a religion *per se*, but merely as an element in that principle of universal altruism which was regnant in his soul. One might as consistently call hydropathy a religion, because of the association of the idea of water with the sacred rite of baptism. Practically speaking, the association of mental healing with religion by Christian Scientists has been employed to coin into hard cash the most sacred emotions of the human soul.

Again, it has been remarked that the beliefs of primitive peoples are often held with an emotional tenacity inversely proportioned to the amount of evidence adducible in support of such beliefs. But Christian Science, so far as I am aware, furnishes the only example of a great body of people who cling with fervent emotion to a belief in that which they know is not true. This is, literally, atavism run mad; for it is more than atavism, in that it embraces a pronounced pathological element unique in the history of mental degeneracy. This well-recognized force must, therefore, be counted as one of the most essential factors which contribute to the success of Christian Science.

Atavism, or the tendency to revert to primitive types, is a force just as potent in the social, political, and religious realms as it is in the domain of mental and

organic life. In the social and political worlds it is manifested in anarchism and socialism. In the religious world its tendency is often in the direction of that most primitive of all known religions — Fetishism — the worship of inanimate objects — the earliest form of idolatry.

In this age of enlightenment, it is, of course, a comparatively rare occurrence for the civilized world to be invited to witness a decided recrudescence of Fetishism in its pristine purity. Mere survivals are comparatively common — so common, in fact, and so modified by environmental conditions, as to escape the notice of all but the critical anthropologist. Even in the revivals of Fetishism, its crudest forms are thus modified by later forms of worship.

Thus Christian Science, which is probably the crudest form of Fetishism possible in this age and country, is a decidedly modified form of primeval Fetish worship. In fact, it necessarily includes the later forms of idolatry, as well as some of the essential elements of polytheism. It cannot be said to be modified by Christianity, the only thing Christian about it being its name. All the rest is pure assumption. Were we dealing with other than a problem in psychiatry, it would be called "blasphemy." But the proverbial cunning of madness alone is displayed in assuming the name and in making the claim that it is a superior form of Christianity. Thus divested of the assumed element of Christianity, nothing remains of the religion of Christian Science but a compound of Idolatry, Polytheism, and Fetishism.

I employ the term "Idolatry" in the sense that it consists in the worship of anything other than God himself; and the term "Polytheism" in its accepted

meaning, the worship of a plurality of gods. They may, therefore, be considered together.

The founder of the sect has laid the foundation for the worship of herself by reconstructing the Lord's Prayer, apparently for that purpose. Thus the opening clause, "Our Father which art in heaven," is transformed into, "Our Father and Mother God, all harmonious." It will be observed that the words "which art in heaven" are cunningly omitted, and the words "all harmonious" substituted; thus evading the implication that the God whom they worship is all in heaven, while the Mother God is still on earth. The substituted words — "all harmonious" — clearly convey the idea of plurality. Otherwise they would be meaningless; for, whereas a unitary God must be supposed to be "all harmonious" with himself, it does not follow that a Mother God on earth is "all harmonious" with the Father God in heaven. Hence the necessity for the asseveration in the Christian Science ritual of worship.

Of course no one can say positively that the unfortunate lady revised the Lord's Prayer with the intention of including herself in the Godhead, but it can be readily believed to be true by those familiar with the salient symptoms of the particular forms of mental alienation, which we have been considering. Monumental egotism is a never-failing symptom of mental degeneracy, and our asylums are peopled with those who believe themselves to be God. What she believes, however, is of small importance compared with the deplorable fact that she is worshipped as the "Mother God," equally with the Father, by the more advanced (in mental degeneracy) of the Christian Science "Church."

It is this fact that invests the whole subject with interest to the alienist and with importance to every sane man and woman.

The most astounding of all the manifestations of the atavic tendencies of Christian Science consists in the practice of Fetishism, practically in its primeval purity. Many such practices are revealed through private sources, but I will confine myself to one or two of those that are already notorious. First, then, the founder's book itself is a fetish. In the first place, it is worshipped as of divine origin, equal, if not superior, in authority to the Bible. Again, the book is fervently believed to be itself invested with the divine power of healing. The authority for each of these beliefs is found in the book itself. Its author's claim to divine inspiration is boldly stated, and the faithful are informed that a devout perusal of its pages will heal their diseases. Accordingly, the truly good Christian Scientist reads it in an ecstasy of holy joy, and some of them have been known to sleep with it under their pillows. If this is not fetish worship, will some unprejudiced student of comparative theology tell us its legitimate classification?

Again, Darwin tells us in his "Journal" (p. 458) that he visited a tribe of fetish worshippers in Keeling Island. One of their fetishes consisted of a wooden spoon, dressed in doll's clothes; and he avers that it danced "in good time to the song of the children and women." He adds that "it was a most foolish spectacle," but that the Malays firmly "believe in its spiritual movements."

I hope the enemies of the founder of Christian Science will not accuse her of plagiarism when they

recall her now notorious spoon fetish. Hers is a metal spoon, silver plated, with her likeness stamped thereon (price, \$3.50 each), and her devout worshippers are each expected to purchase one and use it, habitually, for eating soup withal. Her spoon is also invested with great spiritual power and significance, and he who uses it in the spirit of true worship will realize its health-giving potency. His spiritual strength will be renewed. His soup will do him good.

No, the founder of Christian Science is in no proper sense a plagiarist. Fetish worship is common to all primitive peoples of a certain grade of intellectual development. When the conditions and the phenomena are found coexistent in the midst of a high civilization, science names it "Atavism."

I have said that many remarkable cures of diseases have been effected by persons who practise mental healing under the name of "Christian Science." Of this there is no room for reasonable doubt. I have also shown the illogical attitude of those who claim that the fact of healing demonstrates the soundness of the theory under which they practise. Nevertheless, to the mind of the superficial observer, there is a mysterious nexus between the theory and the results of the practice of Christian Science; and it remains to explain the real cause of the phenomenon, and thus divest it of the glamour of mysticism with which it has been invested by superstition.

In the first place, then, Christian Science, considered as a therapeutic agent, is a system of mental healing. No good Christian Scientist will gainsay that proposition, since there is no such thing as matter, and all is God and God is mind.

The next proposition is, that success in mental healing is dependent upon mental conditions. That is to say, a certain well-defined condition of mind in the patient is absolutely essential to success in mental healing. Christian Scientists themselves will hardly deny this proposition, for to do so would be to repudiate the Master himself as an authority on that subject. Jesus of Nazareth was the first to define the condition necessary to successful mental healing. His whole career was demonstrative of the truth of his declaration. And all the experimental researches of nineteen supervenient centuries have served but to confirm and illustrate its truth. In that declaration he summed up the whole law of mental healing in the one word "Faith." That was the one mental condition on the part of the patient which he constantly insisted upon as essential to the exercise of his power. That it was essential was clearly evidenced by the fact that he could not succeed in healing the sick in his native city "because of their unbelief."

The far-reaching significance of his declaration seems never to have been appreciated at its full value, especially by Christian Scientists and others who believe that mental healing is due to the exercise of some force, miraculous or otherwise, by some agency extraneous to the patient himself. The words of Jesus emphatically negative the belief in any extraneous agency whatever. The word "faith," as before remarked, indicated the mental condition essential to success in healing. It is the principle which energizes the human soul, and without which the soul is powerless to heal the body. And when Jesus declared to his patients, as he did with insistent iteration, "Thy faith hath made thee whole," it

was a clear, positive, and emphatic statement of the one basic principle of mental therapeutics. It was equivalent to saying, nineteen hundreds years in advance, just what modern experimental science has demonstrated to be true, namely, that the mental energy that heals the sick resides within the patient himself. All that the healer does, or can do — all that Jesus did, or pretended to do — was to induce in the mind of the patient the necessary mental condition, to stimulate, by appropriate acts and words, the energizing principle of his soul, — faith. No act or word of Jesus militates, in the slightest degree, against that one emphatic declaration. It was, in fact, a proclamation, or formulation, of the Supreme Law of Mental Therapeutics, — the law under which he performed his wonderful works; the law that he taught to his disciples; the law under which his promise was made that those coming after him should do “even more wonderful works” than he had done; the one universal law under which all mental healing has been accomplished since the beginning of time.

This is Christian Science as Christ understood it. At the very threshold of the inquiry, therefore, we find it to be the very antithesis of the Christian Science of modern times, in that Jesus declared that the healing power resides in the patient, whereas modern Christian Science teaches us, first, that there is nothing to heal, and secondly, that God himself interposes and does the healing.

In undertaking to correlate all methods of mental healing, and to reduce them to one general principle, I shall assume that the Master knew the fundamental law of the science of which he was the Great Exemplar. I shall hazard nothing in this assumption, even from

the most rigidly scientific standpoint, for I shall proceed to show that the discoveries of modern science demonstrate the truth of his declaration.

I shall also assume that there is but one law of mental healing. Nature is not prodigal of laws; but those that exist are immutable, and they are universal in their application. Thus the law of gravitation applies alike to the sun, the stars, the planets, the earth, the falling apple, and the smallest atom in the material universe. The law of mental healing is also universal if "nature is constant," and it applies to all methods alike, without reference to any one's theory of causation or to the names by which the various systems are designated. If, therefore, any person is healed by mental processes, it follows that the law has been invoked, whether he is conscious of it or not; just as the workingman who falls from a scaffold obeys the law of gravitation, although he may never have heard of Newton or his *Principia*. If told that he and mother earth were attracted to each other with a force proportioned directly as to the mass and inversely as to the square of the distance, he would doubtless blush deeply and perhaps deny the soft impeachment, just as the Christian Scientist denies, with hysterical vehemence, that she ever was guilty of healing the sick under the same law that prevails in Hypnotism, Mesmerism, Animal Magnetism, Fetishism, or any of the other isms under which mental healing has masqueraded since the dawn of creation. Nevertheless, it is just as true that there is but one general law of mental healing as it is that there is but one general law of gravitation. What that law is, and why it is effective under all systems and in spite of all theories of causation, I shall now try to make clear to the general reader.

I have shown elsewhere¹ that Jesus of Nazareth was endowed with an intuitive knowledge of the laws of the human soul. The internal evidence of this fact contained in the history of his life, when considered in connection with the discoveries of modern psychological science, is simply overwhelming. Especially is this true of his knowledge of the law of mental healing, the salient feature of which, and the only one which it is important that we should consider in this connection, has already been mentioned above, namely, his declaration that the healing power resides within the patient and not in any extraneous agency; that "faith" is the energizing principle of the soul, and that when faith is perfect "all things are possible." If, therefore, we find that this, the fundamental postulate of the Master, is demonstrated by the facts of Experimental Psychology, we shall be in possession of the key to the mystery. That is to say, we shall have found the nexus of cause and effect which correlates the undoubted facts of healing by the methods of Christian Science, Voodooism, Fetishism, and kindred superstitions with those of Hypnotism, Animal Magnetism so called, and all other methods of mental healing.

Assuming then, provisionally, the absolute veridity of the Master's postulate, it follows that the office or function of the healer is simple to the last degree, and consists in stimulating, energizing, and directing that force within the patient which does the work of healing. And that is what Experimental Psychology has demonstrated to be true in all cases and under all conditions. Briefly stated, all experiments in psychical research, together with all the facts recorded of mental healing in all the

¹ See *The Law of Psychic Phenomena*, chap. xxiii., et seq.

ages of the world, conspire to prove that the following propositions furnish the master-key to all the mysteries of mental therapeutics:

1. Man is endowed with a dual mind, — objective and subjective.

2. The subjective mind controls the functions, sensations, and conditions of the body.

3. The subjective mind is constantly amenable to control by the power of suggestion.

It will at once be seen that, if these three propositions are true, the words of Jesus are scientifically verified, his every act in healing the sick is explained, and that all the facts of mental healing are explicable under the law of suggestion.

That the first proposition is true is attested by every psychic phenomenon that has ever been recorded. That is to say, the mysteries that have puzzled and appalled mankind throughout all the ages have been dispelled and removed from the realms of superstition by the discovery of that fundamental law of psychology. It was first publicly formulated, and the two minds or states of consciousness clearly differentiated, in 1893.¹ Since then it has been accepted as at least a valid working hypothesis by every unprejudiced scientist who has engaged in psychical research. In short, all psychic phenomena attest it; experimental surgery² confirms it, and the facts of organic evolution³ demonstrate its scientific accuracy.

The second proposition is provisional, depending upon the verification of the first and third. It is

¹ See *The Law of Psychic Phenomena*.

² See Surgeon-General Hammond in his *Treatise on Insanity*, quoted by the author in *A Scientific Demonstration of the Future Life*.

³ See *The Divine Pedigree of Man*.

explanatory of what has been vaguely termed "the principle of life," "the recuperative energy of nature," etc.

The third proposition embraces the greatest discovery in psychological science — the law of suggestion. The famous Dr. Braid, of Manchester, England, is entitled to the credit of laying the foundation for the discovery. But it remained for Liébault, of France, to formulate the law, thus rendering it practically available to science. In their hands, however, the law was confined to the phenomena of experimental "Hypnotism," a word which Braid coined to soften scientific prejudice against Mesmerism.

Under the dual-mind theory, however, it was seen that the law of suggestion is, *ex hypothesi*, a universal law of the subjective mind, dominating it under all states and conditions of the objective mind. It seems almost superfluous to say that this indefinitely enlarged the field of effective suggestion, and threw a flood of light upon all phases of psychic phenomena. For it was not only explanatory of why it is that the hypnotized subject can, by mere suggestion, be made to believe himself a dog or a devil, a great statesman or a helpless infant "mewling and puking in the nurse's arms," but why it is that the subjective mind of the spirit medium, dominated by the ever-present suggestion that she is under the control of spirits, not only believes itself to be a spirit, but will personate any one suggested, real or imaginary. It also shows how it happens that our lunatic asylums are full of Napoleons, Hannibals, kings and potentates, gods innumerable and sporadic devils.

What is more to our present purpose, it reveals the secret of all so-called imaginary diseases, or, more prop-

erly, diseases induced by morbid imagination; or, to be scientifically exact, diseases induced by false suggestions. It is safe to say that nine-tenths of all the ailments of the human family may be traced to this source. Such suggestions arise from a thousand different sources; for example, newspaper advertisements of patent medicines, especially those containing a long list of "symptoms" indicative of imminent danger and the stern necessity for immediate investment in a dozen bottles of the medicine. The success of this plan of suggestion is rendered easy by the fact that there are few imaginative people who cannot, by diligent introspection, find one or more of the advertised symptoms. Educated physicians are all well aware of the potency of suggestion in the creation of diseased conditions of the body. They have been so instructed in their schools and colleges, and many of them have had valuable practical experience along those lines in their daily practice. Comparatively few, however, have practically tested the potency of suggestion as a remedial agent. Hence they will be prepared to give but a theoretical indorsement of what is to follow. Those, however, who have studied the subject by scientific methods, and have had practical experience besides, will instantly recognize in the psychological formula above given a potentially complete explication of all the phenomena of mental healing. A very few words will suffice to render the explanation clear to the general reader.

For the purposes of this argument we may leave the first proposition out of consideration altogether. The second proposition, that "The subjective mind controls the functions, sensations, and conditions of the body," embraces that potential healing force, resident within

the body, which Jesus said must be energized by faith. It matters not what terminology we may employ to designate it, the fact remains that it exists. We may call it "the principle of life," or we may designate it by the histological term, "communal soul" (Haeckel), which is that intelligent energy which controls and regulates the functions of the innumerable cells of which the whole body is composed, each one of which is itself an intelligent entity. Each cell is highly specialized with reference to its location and its consequent functions, each having its special duty to perform. I do not step outside of pure materialism when I say this. Nor do I do so when I say that "the functions of an organ are the functions of the cells of which it consists," and that "disease is abnormal performance of function by one or more organs or tissues."¹ Disease of the body, therefore, is disease of the cells of the body, and the health or disease of the cell is determined by its normal or abnormal food-supply, which in turn depends upon the circulation or composition of the blood.²

These, of course, are very general terms, and they are of very wide, if not of universal, application. No educated physician of any of the schools will gainsay them, and every histologist will recognize them as embracing the very fundamentals of his science. Nor will any scientist deny that each and all of these cellular intelligences, which comprise all that there is of any multicellular organism, are governed by a central intelligence, sleepless, ever alert for the preservation of the body, instinctive, automatically controlling the involuntary muscles, and capable, in response to stimuli, of acceler-

¹ Green, *Pathology and Morbid Anatomy*, pp. 29, 30.

² *Op. cit.*

ating or retarding the action of every fibre and function of the body. These stimuli may be either physical or mental. They may consist of food supplies, normal or abnormal, or of medicines, or they may be purely mental. Thus the heart's action may be accelerated or retarded, or suspended altogether, by good or bad news. The same may be said of the circulation of the blood, secretion or excretion, digestion or assimilation—in short, the normal performance of any of the functions of the body may be inhibited or promoted by appropriate mental stimuli. It goes without saying that when the stimulus is purely mental the action of the central intelligence upon the cells involved is also mental. It may be direct, as in imparting an impulse through the nerve ganglia, or it may be indirect, as in the re-establishment of normal metabolism in diseased cells by the induction of an increased flow of blood to the group affected. In either case it is a mental phenomenon induced by a mental stimulus. Medicines could do no more, and frequently they do much less.

Now, the existence of this central controlling intelligence, by whatever name it may be designated, or whatsoever theory one may entertain as to its ultimate origin or destiny, its powers, its potentialities, or its limitations, is now recognized with practical unanimity by all students, not only of the new psychology, but of physiology, physiological psychology, and histology. Moreover, what is more to our present purpose, every student of experimental psychology knows that this central intelligence is constantly amenable to control by the subtle power of suggestion. Indeed, experimental psychology may be said to have revealed its existence. It certainly has demonstrated its suggestibility, as well as its potency

as a therapeutic agent when energized by an appropriate mental stimulus.

These stimuli are now known to psychological science by the generic name of "suggestions." They are multi-form in character, and in the hands of the skilful practitioner they are varied in accordance with the individual idiosyncrasies of his patients. But multiform as therapeutic suggestions are in practice, they may all be comprised under one generic term having reference to the fact that all disease, in its ultimate analysis, is disease of the tissues or of the cells of which the tissues are composed. The central intelligence, or "communal soul" as Haeckel terms it, necessarily conveys the mental stimulus which it receives to each of the cells affected. And as each cell is itself an organic entity, endowed with a mental organism of its own, and performing all the functions of animal life, it follows that the mental stimulus received by the communal intelligence is conveyed directly, as a mental stimulus, to the mind organism of each cell, thus stimulating it into normal activity. Effective therapeutic suggestions, therefore, are those which reach the intelligences composing the organic tissues that are diseased, stimulating those that are being atrophied, and regulating their supply of nutriment in cases of hypertrophy.

Any student of histology, who is also acquainted with the psychology of micro-organisms, will readily grasp my meaning and be able to extend the principle involved to all cases of effective mental healing. Even the non-professional reader will see at a glance that this hypothesis greatly simplifies the whole theory of suggestive therapeutics, in that it reveals the machinery through which mental stimuli, or suggestions, are made effective.

Moreover, it divests "suggestion" of that indefinable glamour of mystery with which it has been invested. To the professional psychotherapist it will at once be obvious that other systems of healing, not supposed to be suggestive, owe their success, in great measure, to this principle; for example, massage and osteopathy. The masseur may well be supposed to convey, unconsciously, suggestions directly to the affected cells by manipulation of the group, and the osteopathist, also unconsciously, by manipulating the nerve centres leading to the group. This hypothesis will, in fact, be found to afford an explication of many groups and sub-groups of phenomena, particularly of all cures effected by touch, digital manipulation, or laying on of hands. Besides, it affords an explanation of many other mysterious psychical phenomena, outside the domain of suggestive therapeutics, which cannot be mentioned here.

It must now be obvious that a generic term for therapeutic suggestion must have special reference to the fact that, in its ultimate analysis, effective suggestions are those that directly or indirectly reach the seat of the disease; that is, the cell intelligences composing the diseased tissues. Its intimate association with histology, or the branch of biology that treats of the structure of the tissues of organized bodies, suggests histo-suggestion; but partly for the sake of euphony, and especially to avoid coining a word, I have chosen the term "histic suggestion" to designate that form of mental stimulus that energizes diseased tissues, or the cells of which they are composed.¹ In this sense the term is

¹ "Histic" is a word not found in any English dictionary with which I am familiar. My authority for its use in connection with His-

generic, for that it embraces the efficient cause of all therapeutic effects of all forms of suggestion. Specifically, it may be defined as that direct method of conveying therapeutic suggestions which consists in personal contact or digital manipulation. I may add, *en passant*, that this method, when employed with intelligent purposefulness by the proper person, is by far the most efficient and universally practicable of all the multifarious methods of imparting therapeutic suggestions. Indeed, it is often the only method by which they can be imparted. A demonstrative illustration is found in the soothing touch of the sympathetic mother, often instinctively applied to an infant too young to assimilate any other form of mental stimulus. Intelligently applied, its effects are indefinitely multiplied. Many fantastic theories have been invoked to account for this well-known phenomenon, often with the view of removing it, with its innumerable cognates, from the domain of suggestion. But, in its ultimate analysis, it ranges itself under that generic term. It is hysteric suggestion, peripherally applied. In other words, it is a mental stimulus or impulse, conveyed by a second subjective personality to the affected cells, precisely as the same impulse is conveyed by the central subjective intelligence of the adult patient in response to any form of suggestion.

This may seem to be a digression. But I have deemed it necessary, not only to assert the universality of the law of suggestion as applied to mental healing, but to demonstrate it by an appeal to the universally acknowledged facts of modern science. To that end I have sought

tology is found in the English translation of Professor Haeckel's *Riddle of the Universe*, chap. vii.

to remove therapeutic suggestion from the domain of the mysterious and the occult, as well as from the dismal realm of superstition. I have endeavored to show its reasonableness, its conformity to all the known facts of human experience, and that its simplicity stamps it with the sign-manual of scientific truth. I leave it to the intelligent reader to draw his own conclusions, and to make his own application to Christian Science, as well as to all other methods of mental healing.

For seeking to place mental therapeutics in the custody of a law I shall doubtless be accused of trying to rob the Divine Father of the honor due to the Healer of his children. I am not. On the contrary, I regard it as the strongest possible incentive to divine worship, the greatest conceivable reason for profound adoration, the most indubitable evidence of his infinite mercy and loving kindness to his children, to reflect that God has instituted a universal law for the healing of the nations, — Christian, pagan, and savage. No stronger or more convincing teleological argument has ever been made than that derivable from the one pregnant fact that God has instituted a law of mental healing that adjusts itself with equal facility to all peoples, all beliefs, all superstitions, and all grades of civilization. Ancient history tells us of an indefinite number of methods, each based upon some fantastic theory or upon some gross superstition. Yet each method seems to have been equally effective, for history informs us that under all systems "miraculous" cures were common occurrences. In view of this well-known fact, one may well pause to inquire what would have been the fate of those primitive peoples if the law of suggestion had not been

as potent for good as for evil — for the promotion of health as for the creation of disease? For untold centuries suggestion, in its myriad forms, was the only therapeutic agency available. But it was perfectly adapted to primitive conditions of human intelligence; *a fortiori*, because of its perfect adaptation to all forms of belief, superstitious or otherwise.

What is, if possible, of still more profound teleological significance is the fact that it is adapted to the uses of the highest civilization, for when the law is scientifically comprehended it may be intelligently applied. Besides, in the midst of the highest civilization yet attained, primitive minds still exist, primitive methods of reasoning still prevail, atavism still constitutes a retrograde force, and primitive superstitions, more grotesque and idiotic than any mentioned in ancient history, dominate the minds of large classes of our population. Why should they be vilified and abused, buffeted and contumeliously entreated, by press and pulpit, for that which is their misfortune and not their fault? They are availing themselves of the law of suggestion in healing their sick and afflicted, and they are doing it in a way that is perfectly adapted to their grade of intelligence. They heal many, and their religion stands the test of quantitative analysis.

XIII

PROPHECY, ANCIENT AND MODERN

NO one will dispute the proposition that the trend of modern science is in the direction of demonstrating that whatever happens in this world is brought about in accordance with natural law.

In other words, it is the province of science to remove every event from the realm of the supernatural, and to demonstrate that God created and rules this universe by and through the operation of immutable laws, which were implanted in matter and spirit from the beginning.

It is a self-evident proposition that science does far more reverence to God in thus ascribing to Him such a power and such an intelligence, than does superstition in believing Him to labor under the necessity of supplementing His work by special creations and miraculous interventions.

That the triumphs of science in this direction have been many and important, no one will deny. That it has been opposed at every step in its progress by theological dogmatism is current history. The reason is obvious. When science first declared its independence, it was denounced as atheistic, and it was persecuted accordingly. So great was the antagonism at first that it was tacitly understood for a long time that science was opposed to religion; and it was many years before

any one seriously thought that there could be any harmonious relations between them.

Gradually, however, it has dawned upon the contesting parties that the conflict is not between science and religion, but between science and theological dogmatism. With this understanding, the relation of science to the Church has, within a few years, undergone a decided change.

The great body of the intelligent members of the Church no longer hold themselves in antagonism to the essential claims of science; and science no longer disputes the essential tenets of the Christian religion. One by one the points have been yielded, until there are but few essential features of difference in dispute.

The miracles were the last to yield. For many years they have been the stumbling-block; and they would doubtless have continued to stand in the way of a full acceptance of the essential truths of Christianity had not science itself been able to demonstrate the fact that the phenomena which were supposed to have been produced by miraculous power are clearly within the domain of natural law.

And now for the first time in the history of the Church it has dawned upon the world that Jesus never claimed that he could perform a miracle. That is to say, he never claimed that he transcended natural law in performing his wonderful works. On the contrary, he gave us to know, by word and deed, that he always acted strictly within the law. In point of fact, history and science unite in showing that Jesus was the first discoverer of the great law under which he wrought his wonders, and which has but recently been rediscovered.

Science and the Church are, therefore, now in practical accord on this great question.

But there is another stumbling-block which the Church has not been disposed to yield, and which science has thus far refused to accept and failed to explain. I refer to prophecy in general and Messianic prophecies in particular.

I scarcely need to say to you that prophecy, as the term is generally understood, cannot be admitted among the verities. It is generally understood and defined as a prediction made under the immediate influence and inspiration of God. As this implies a miraculous intervention of divine power, science, of course, cannot recognize or deal with it in the absence of such proofs as are required under the strict rules of induction.

Nevertheless the belief that there exists, somewhere, the power to make inerrant predictions is astonishingly prevalent, even among those who regard themselves as altogether too scientific to believe in special interpositions of Divine Providence in the affairs of mankind.

In strict justice to everybody it must be admitted that there are thousands of things happening every day, and have been happening for thousands of years, that have never yet been accounted for; and many of them *seem* to point unmistakably to the conclusion that the faculty of inerrant prophecy exists. Ultra scientists, as usual, content themselves with a wholesale denial of the facts. Others believe the facts and account for them on the theory of immediate divine inspiration. Which of these two classes is the less scientific it is difficult to say.

Another class believes the facts and denies the inspiration, but proceeds to account for them on grounds

less tenable, if possible, than either of the others. A large number of this class hold that, in some unaccountable way, spirits of the dead come into possession of a knowledge of all things, past, present, and future — especially of the future. Others, who are inclined to be extremely scientific, without reference to facts upon which to base their propositions, tell us that Time is merely a mode of finite thought; that it really has no existence in point of fact; that past, present, and future events are somehow mixed and jumbled up in one eternal Now; and that all that is necessary to constitute a true prophet is the ability to tell which is which. The same brand of philosophers also tell us that there is no such thing as space; and the ablest of them — that is those possessing the greatest ability to pervert the plain facts of nature — insist that there is no such thing as matter. In other and plainer words, they hold that this beautiful world, with all its rich varieties of land and sea, hills and dales, mountains and valleys, rivers and lakes, trees, birds, and flowers, together with the grand and glorious universe around us, constitute one stupendous, cosmic lie. With them the heavens do not declare the glory of God, nor does the firmament show forth His handiwork. On the contrary, their philosophy teaches us that the heavens are grand illusions, instituted on a cosmic scale, for no conceivable object whatever save to delude and destroy men who do not exist. The people who believe these things also believe themselves to be “scientists.”

Now no one needs to be told that true science deals largely with just those things — matter, space, and time. As to time, and the human events occurring in it, we can take cognizance of but three grand divisions, namely,

past, present, and future. Of the past we can be reasonably certain through memory. Of the present we know through consciousness. But of the future, no absolute knowledge can be claimed, save of those events in the physical universe which are governed by mathematical law. Nor can the possibility be admitted that *absolute* knowledge of future human events is within the range of the powers of the human intellect. Please to remember that I use the word "absolute" in its strictest sense, as unrelated, unconditioned.

Nevertheless there are numerous and well-authenticated instances of prophecy or prevision in modern times which it is the duty of science, or of scientists, to account for, instead of taking refuge behind an assumed skepticism.

But as no one has ever attempted an explanation in harmony with known laws of nature, I shall beg your indulgence while I make an attempt to do so.

Leaving the Messianic prophecies out of consideration for the moment, I remark that there are two classes of previsions to deal with. The first embraces those cases where a specific event is predicted for the near future; but in relation to which there is a pre-existent fact which, if known to the one who made the prediction, would take the case out of the category of previsions. Thus, if I predict that John Smith is going to New York to-morrow, when in fact he has no present intention to go there inside of a month; and if he should receive, later, a telegram from that city announcing the dangerous illness of a member of his family and requiring his immediate attendance, he would doubtless regard it as a wonderful case of genuine prevision. But if it should transpire that I had previous knowledge

that such a telegram had been sent, he would regard it as a very commonplace case of fraud or false pretence.

But suppose he was in consultation with a psychic, — a spirit medium so called, and consequently a mind reader. Then suppose that said medium possessed no knowledge whatever, obtainable through sensory channels, of the sickness or of the telegram. It is, nevertheless, within easy range of possibility for the medium to obtain the knowledge of the facts by means of telepathy. That is to say, the sitter is in constant telepathic *rapport* with his own family. But telepathy is exclusively a faculty of the subjective mind. Consequently, not being a psychic, the sitter receives the information unconsciously to his objective senses. The medium, however, being a psychic, reads the contents of the sitter's subjective mind; and thus obtains the data for the prediction. In the meantime, if the medium courts prophetic honors, she simply prophesies that the sitter will go to New York on the following day.

Here I must pause to invite your attention to a very curious and interesting phase of this class of phenomena. They are exceedingly flexible and are adapted to various uses. They can be fitted to all forms of belief, and they can be made to suit all customers.

I have said that if the medium poses as a prophet she simply predicts that her sitter will go to New York on the day following. That is prophecy, — mediumistic prophecy.

If she poses as a spirit medium, she tells her sitter that the spirits say that his wife is very sick and wants him to come home immediately. That is spiritism.

If she chooses to claim to be divinely inspired, she

tells her sitter that the Lord has spoken to her, saying: "Tell the young man to arise quickly and go hence; for his wife, who sojourneth in Gotham, yea, even the greater Gotham, is sick unto death." That is inspiration.

If the medium poses as a clairvoyant, she tells the sitter that she sees a letter or a telegram on the way from New York containing news that his wife is sick. That is clairvoyance.

If she seeks fame as a clairaudient, she tells her sitter that she hears the voice of his wife calling him to come to her, for she is sick. That is clairaudience.

If she poses as an astrologist, she casts the sitter's horoscope, and declares that the stars indicate the serious illness of a member of his family on the current date, and a consequent hasty journey on his part. That is astrology.

If she is a gypsy fortune-teller, she looks in the sitter's hand, or shuffles a pack of greasy cards, and tells him that he is about to take a long journey on very important business; and if he will give her another dollar, she will tell him all about it. That is fortune-telling.

But if the psychic seeks telepathic honors, she just simply tells the truth, and informs her sitter that she reads in his subjective mind a message from his wife, announcing her illness and desiring his immediate return home. That is telepathy. And that is the truth; for that is the simple explanation of the phenomenon. In each of the cases mentioned, the explanation is the same. The classification, therefore, either as a prophecy, a spirit communication, a telepathic message, or what not, depends entirely upon what the particular psychic happens to think or say about it. And that obviously

depends upon the suggestions embraced in her education. If she believes it to be a telepathic message she declares it to be that and nothing more. If she poses as a prophetess, she makes a prediction based upon the information received telepathically.

But it is not prophecy in any true sense of the word; for it is based upon a fact, known to the psychic, which must inevitably lead to the event predicted. But it is a typical case of modern prophecy. And I undertake to say that ninety-nine one-hundredths of all the marvellous cases of correct predictions — many of which are well authenticated — can be traced to telepathy as the source of positive information regarding the subject matter of the supposed prophecy. And thus it happens that in these days of spirit mediums, fortune-tellers, clairvoyants, magicians, and mahatmas, the supply of prophecy is more nearly equal to the demand than ever before. But it keeps them all busy ministering to the insatiable cravings of those strenuous souls who are either longing for husbands or yearning to get rid of them.

There is another class of cases which are a trifle more obscure, and which have been held up as inexplicable under the telepathic theory.

I will trouble you with one, because a certain great and famous London editor, whom you all know by reputation, has given it to me as a case which telepathy cannot account for. He had criticised my first published work — *The Law of Psychic Phenomena* — because I omitted to explain prophecy under the terms of my hypothesis. It is true that I omitted it, but I did so for the simple reason that I had not at the time any cases sufficiently well authenticated to warrant me in treating the subject from a scientific standpoint.

The case related is briefly this: The editor, in company with a lady, visited a psychic — a so-called spirit medium. In the course of the séance, the psychic prophesied that the lady would visit America within a few months. The lady protested that such an event was impossible within the time given. Nevertheless she did visit America within the time. She was suddenly and unexpectedly called to visit the bedside of a very sick mother.

What is the explanation? The great editor could find none outside of spirit intercourse, or a divine power of knowing the future.

The telepathic explanation is, in his mind, clearly out of the question. To my mind the phenomenon is clearly and easily explicable under the telepathic hypothesis. Let us see.

If there is anything about telepathy that is more clearly established than anything else, it is that near relatives, especially parents and children, are constantly in telepathic *rapport* with each other, especially when one or the other is sick or threatened with illness or other disaster. It is equally well established that the subjective mind of each individual has a perfect knowledge of the conditions of the body which it inhabits. This being true, it follows that when the seeds of disease are in the system, the subjective mind is aware of the fact, and it can easily foresee the time of probable culmination in serious illness. This information is naturally conveyed to those who are interested, and it thus becomes a part of their subjective mental equipment. If they do not happen to be psychics themselves, that knowledge is unconsciously possessed; and is only revealed to their normal consciousness when they come

in contact with a psychic. Then, as I have before remarked, if the psychic is ambitious of prophetic honors, she prophesies whatever event is sure to follow, without divulging the fact that leads her to that conclusion.

These predictions, however, can in no wise be designated as prophecies, — scarcely as previsions. They are simply predictions based upon knowledge of proximate and entirely adequate causes.

No matter how that knowledge is obtained, whether by a previous inspection of family records and tombstones, or by means of telepathy, the mystery is dispelled the moment it is known that the alleged prophet is in possession of that knowledge.

It is obvious that in the cases thus far mentioned it does not require even good judgment to make an absolutely correct prediction. It requires only the simple power of mind-reading to ascertain the governing fact. Thus far no other power of the subjective mind is brought into requisition.

I now approach another class of previsions that rest upon a far different foundation. I will premise by saying that there is nothing miraculous about prophecy. It simply calls into exercise certain inherent faculties of the human soul. It transcends no law. On the contrary, like every other power on this earth, or in the heavens above, or in the waters under the earth, it operates strictly within the limits of natural law. It neither annihilates nor transcends any of the three eternal verities, — matter, space, or time. Nothing can transcend these. Every phenomenon that is tangible to the senses is manifested through matter. All things exist in space. Time is simply the fact of continuous

or successive existence. Its three grand divisions are, the past, the present, and the future; and these furnish the sphere of all activities and events, finite or infinite. No one of the three can take the place of either of the others or be confounded with it.

It is a maxim of logic that whatever is self-evident requires no proof. That the existence of matter is self-evident, no one but a metaphysician will pretend to deny. Moreover, science tells us that matter is indestructible. It can be changed in form but not destroyed.

Space is another self-evident fact; and the normal mind cannot so much as conceive the possibility that there exists any power that can annihilate it; or that anything can exist except in space.

Time is another of the self-evident, eternal verities. It requires no proofs to demonstrate its objective reality. But if proofs were necessary, the Creator Himself has supplied them; for the starry heavens constitute one stupendous, cosmic horologe, which marks the grand succession of events, human and divine.

As I have before remarked, the past, present, and future are not interchangeable. It follows that nothing can be positively known except the past and the present. It would require a miracle to give one absolute, unconditioned knowledge of future events; for there is and can be no law of the mind that would enable one to cognize that which does not exist.

It involves an absolute contradiction as gross and palpable as it would be to suppose that God could make a three-year-old horse in a minute.

Nevertheless man has a means of knowing the future. Thus in the physical sciences, when we once know the

law governing a subject matter of inquiry, we can predict the future with unerring certainty. For instance, when the laws governing planetary motion were discovered, astronomers were enabled to foretell the eclipses and other stellar events with mathematical exactitude. But this is not prophecy in the sense in which we are considering the term. We are considering human events, and they are not governed by mathematical laws. If they were, man would not be a free moral agent. Being a free moral agent he is at liberty to choose the wrong instead of the right. He has it in his power either to violate every law of nature or to place himself in harmony therewith, just as he sees fit.

Nevertheless he is governed by law. He is governed by the laws of his physical being, the laws of mind and soul, and by the laws of progressive development of the mental, moral, and spiritual nature of mankind. Moreover, whatever the segregated individual may do as an independent entity, mankind considered *en masse* and by great epochs or dispensations, is governed by natural laws that operate with absolute certainty of ultimate results. It will readily be seen, therefore, that previsions may be predicated upon such laws with a great degree of moral certainty of ultimate fulfilment.

Now the great question is, what faculties of the mind are brought into requisition in making an inerrant prophecy? I will answer that question by first defining prophecy as I understand it.

A prophecy is nothing more or less than a statement of the conclusions derived from reasoning from cause to effect. In other words, an inerrant prophecy is a logical conclusion derived from a correct premise. That premise may consist of a known fact or a known law,

or of the two combined. But there must be one or the other. The prophetic mind must have data from which to deduce conclusions as to future events, precisely as ordinary, every-day mortals search for ordinary, every-day truth.

It follows that the prophetic potential resides, to a limited extent, in the objective, reasoning mind. I have already remarked that in the domain of the physical sciences, inerrant predictions as to future events are common. It is also true that the highly cultivated objective mind is equal to a very high order of previsions regarding human events.

A striking instance of this occurred some years before the War of the Rebellion. Many will remember the cry of incredulity and indignation which went up from all over the land when William H. Seward declared that there is a "higher law than the Constitution"; that an "irrepressible conflict" was then going on between "opposing and enduring forces" — freedom and slavery — and that a crisis was already impending which would decide the question forever.

This fulmination comprised the conclusions derived from a long and earnest inductive study of the situation. It was derided at the time as a wild, fanatical dream. But when, two short years later, the first gun was fired on Sumter, Seward was hailed as a prophet.

It will also be remembered that when that event occurred, Mr. Seward predicted that the war would be over in ninety days. Some of Mr. Seward's admirers, referring to the first prediction, went so far as to declare him to be an inspired prophet. But the two predictions simply exhibit the marked contrast between his sagacity as a politician, and his weakness as a military man. He was a statesman, but not a soldier.

It will thus be seen that a very high degree of prophetic power resides in the objective mind; and that the only faculties called into requisition are those of pure reason, based on an intelligent observation of facts.

Inerrant prophecy, therefore, in the sense in which we have been considering it, is nothing more or less than the result of good judgment. By good judgment, I mean the power to deduce correct conclusions from given premises.

It now remains to consider prophecy in its higher aspects; that is, prophecies which call into exercise the faculties of the subjective mind.

In these the same steps are necessary, namely, first acquiring the data, and second, exercising the faculty of deduction. As this faculty is potentially perfect in the subjective mind, it is obvious that marvellous results are possible. And when it is remembered that the faculty of intuitive perception also belongs to the subjective mind, it becomes evident that the prophetic power of the soul is practically unlimited. It is in fact limited only by the laws under which it performs its functions.

It must not, however, be supposed that the sources from whence the subjective mind may acquire its data are limited to the intuitional faculty. The province of intuition is that of general laws or first principles. But the data from which the subjective mind draws its prophetic conclusions are not limited to these. It may also acquire particular facts, or even general laws, from the researches of the objective mind; and, as its memory is absolute, it possesses in that alone a vast storehouse of available data from which to draw prophetic deductions.

It is frequently impossible in particular cases of modern prophecy to know just what is the quality and character of the data relied upon. Sometimes, however, we can afterwards see the process clearly defined. Thus, in 1803, a celebrated Quaker preacher, named Joseph Hoag, who was also a psychic, published a prophecy in which he predicted a schism in the various churches of the United States, including his own.

He also prophesied the agitation of the slavery question, its entrance into politics, the consequent civil war, resulting in the abolition of slavery. The Quakers believe him to have been directly inspired by God Himself. They can see no other way to account for it.

It is clear that the unaided reasoning powers of mankind were, at that date, unequal to such a prevision. At least no one in his normal condition made this prediction. But this obscure preacher, while in a trance or a tranceoid condition, was enabled to make a prediction, the literal fulfilment of which to-day fills the minds of his people with reverential awe.

What fact he may have been cognizant of that enabled him to predict a schism in his own church, I know not. But it is now clear that one event which was then sure to happen in the near future, was amply sufficient to release the forces which inevitably brought about the fulfilment of his prophecy. That event was the abolition of the slave trade, the Constitutional limitation of which was to expire in 1808. Slavery was already practically confined to the South. It was unprofitable in the North, and hence its gradual abolition there had been provided for. This was current history. The psychic also knew the stern, uncompromising devotion of the New England character to the cause of human

liberty, its hatred of oppression, its pious regard for the natural rights of man; and he foresaw that these qualities would shine forth with renewed lustre and become an aggressive force in the New England political character just as soon as a cargo of New England rum could no longer be profitably bartered for a cargo of African slaves. It was also natural that when the controversy was once begun, the churches would be the first to divide; that intense sectionalism was sure to follow, with all its train of prejudices, hatred, contumely, hysteria, and violence, culminating in the total destruction of the cause of the controversy, and placing the United States where she properly belongs — in the van of human progress. It will thus be seen that whilst the prophecy of this obscure psychic preacher antedated that of Mr. Seward by more than half a century, and was infinitely more specific as to detail, it was equally exact, and its fulfilment involved the greatest tragedy of modern history. It is, however, but a feeble illustration of the vast difference in the deductive powers of the two minds. That difference can be appreciated only when we come to consider the Messianic prophecies.

But it may be here remarked, the fact that the subjective mind has intuition from which to draw its arguments, and that this faculty is potentially perfect, easily accounts for the marvellously correct deductions which in all human history, sacred and profane, have been recorded under the name of prophecy. It is prophecy, in the highest and the noblest sense of the term; for it is the foreseeing and foretelling of future events under and by virtue of the immutable laws of God.

Now let it not be forgotten that the special province

of intuition is the laws which govern the being and destiny of the human soul. In animals and primitive man it is known as the instinct of self-preservation, — pertaining solely to the safety and development of the body and the perpetuation of the species. As objective reason developed, it took the place of the purely animal instinct to a great extent, in matters of this world, and the latter developed into the higher form of intuition. Being a faculty of the soul its higher manifestations pertain to the soul. It is not exempt from the law of suggestion; but in the absence of suggestion it performs its highest functions untrammelled. Hence it was that before the days of philosophic doubts and scientific skepticism, intuition laid the foundation for the grand superstructure of modern civilization.

Misinterpreted though it has been, even by its most devout adherents, the fact still remains that the Bible contains the natural history of the human soul. Misunderstood as have been the phenomena therein recorded, even by those who experienced them, it still remains that they constituted the necessary steps in the evolution of the religion absolute.

The first great step in that direction was taken when the monotheistic idea was evolved from the inner consciousness of the earliest Jewish prophet. That the idea of one living God was an intuitive perception is evidenced by the fact that the suggestion could not have emanated from any of the polytheistic, idolatrous peoples with whom the Jews were in contact. It was an original conception, and, crude though it was in its inception, it was the immortal germ of a great truth.

It was inevitable that the idea should be limited and perverted by the suggestions embraced in the religions

of the surrounding nations. Each had its own gods, and there were enough of them, such as they were. It was natural, therefore, that the one God of Israel should be their God exclusively, — a tribal God. It required many years of progressive development to expand the original monotheistic conception so far as to embrace all humanity. Isaiah, I believe, was the first to proclaim the broad intuition. I say "intuition," for it could have been nothing less, since it was a vast expansion — a generalization of the limited, traditional conception of the God of Israel. It remained, however, for the inerrant intuitions of Jesus to dispel the anthropomorphic conceptions of the earlier prophets and to give to the world its first conception of the living and true God of love, mercy, and benevolence, the loving Father of all humanity. Moreover, what is of still more profound significance, Jesus was the first to proclaim in specific and unmistakable language, the two cognate, concomitant facts that we are the sons of God, and that the kingdom of Heaven is within us. But it must not be forgotten that the intuitions of one of the earliest prophets shadowed forth the same fact in the broad declaration that God created man in His own image.

This declaration has been scoffed at during all the ages of so-called "scientific" skepticism, solely because of the anthropomorphic conceptions of its meaning by the critics who deride it.

It is, nevertheless, when considered in its true light as referring to the faculties of the soul instead of the shape of the body, the most remarkable instance recorded in history of a genuine intuitive perception of a great and fundamental truth. According to Bible chro-

nology, it took nearly two thousand years of progressive development of the prophetic faculty to produce a man capable of putting that intuition into words comprehensible to the objective mind. It has taken two thousand years more for the objective mind to verify that intuition by the processes of induction. And it is verified and scientifically demonstrated by a simple analysis of the faculties of the subjective mind, — the mind of the soul.

It will be asked, in this connection, why may not the Mosaic account of Creation be accepted as scientifically correct, since the same writer was responsible for both the history and the intuition. The obvious answer is this: Because the province of intuition in man is that of great general principles and laws of the moral and spiritual universe, and not of the specific facts and events of physical science. If men would learn to make this broad and obvious distinction they would find no difficulty in recognizing the great and fundamental truths of spiritual philosophy with which the Bible is overflowing.

No better illustration of this distinction and the necessity of observing it can be conceived than the very instance we are considering.

For here we find, in one chapter, — the first in the Bible, — an account of the creation of the physical world that no one presumes to defend as scientifically possible; and in the same chapter we find a scientifically accurate statement of the most stupendous and fundamental truth of all that concerns the relations existent between God and man. Moreover, it is demonstrative that it was the intuition of man, and not a direct and miraculous inspiration from God; for if it had been

the latter there could have been no such admixture of fundamental spiritual truth and palpable physical error.

The great lesson that it teaches is that God rules the spiritual and the physical world alike by and through the operation of natural law; and that His method of inspiration is by implanting in the primordial germ the seeds of the divine power of intuitive perception of fundamental and essential truth.

In like manner, the Messianic prophecies originated in an intuitive apprehension of certain principles of natural law. With these principles for a major premise, the logical deductions were crystallized into a prophecy of a coming leader whose voice the world would hear and obey.

The first prophecy pointing unmistakably in that direction was that of Moses. I shall be obliged to confine my remarks largely to his prophecies for three reasons: first, for want of time; secondly, because his was the most clear, concise, and direct to the point; and thirdly, because his was the principal one bearing the unmistakable stamp of absolute originality. Most of the others, being later productions, are obviously open to the inference that they may have been inspired by that of the great law-giver.

In order to understand the prophecy of Moses fully, it is necessary to recall briefly the circumstances under which it was made. It will also throw much light upon the prophecies of his successors.

Moses was not only a prophet, but a man of affairs. If the blood of kings did not flow in his veins, he was at least born to command.

Educated in all the learning of the Egyptians, he still clung to the religion of the Israelites. His mind was

filled' with their traditions, and he worshipped the God of his fathers. He was the chosen leader of his people, and he had delivered them from the house of bondage. He had shown them many signs and wonders, and the covenant had been renewed amid the smoke and the thunders of Sinai. Their forty years' sojourn in the wilderness was drawing to a close, and they were about to cross the Jordan. He had conducted them to the threshold of the promised land, but was himself prohibited from entering. His days were numbered. He was preparing to ascend Mount Pisgah to view from afar the future home of his people and there to close his long and eventful career. Preparatory to this he summoned all Israel before him upon the plains of Moab, to hear his final words of counsel and to receive his last blessing. Then followed one of the most remarkable discourses that ever fell from mortal tongue. He began by reviewing the principal events of their long and wearying journey through the wilderness. He recounted their trials and their triumphs.

He recited many of the rules of civil polity that had been enacted in the past. He reminded them of the covenant and of the duties required of them by its terms and conditions.

He rehearsed their rebellions and denounced them for their disobedience. He pronounced the direst curses upon the wicked and rebellious, but reminded them of God's mercy to the penitent. He gave them particular directions for the selection of a temporal leader, — the election of a king, — describing his necessary qualifications in terms that should convey a much-needed lesson to the people of that country. He then launched forth into a dissertation on the subject of their moral

and religious duties. He set forth the status and duties of the priesthood; and warned the Israelites against the immoral practices of the people into whose country they were about to enter. He laid particular stress upon the necessity for avoiding the practices of the necromancers, the charmers, the witches, the consulters of spirits, and all other producers of spiritistic phenomena.

Having done this, he proceeded to utter a prophecy that has done more than any other one thing to shape the destiny, mould the character, inspire the hope, and perpetuate the homogeneity of the Jewish race.

Nor is its influence confined to that people; for it constitutes one of the bulwarks of Christian faith in the Divinity of Jesus.

The words are these:

“The Lord thy God will raise up unto thee a Prophet from the midst of thee, of thy brethren, like unto me; unto him ye shall hearken.”

He believed himself to be reiterating the very words of God, for he declared that the Lord God said unto him:

“I will raise them up a Prophet from among their brethren, like unto thee, and will put my words in his mouth; and he shall speak unto them all that I shall command him.

“And it shall come to pass, that whosoever will not hearken to my words which he shall speak in my name, I will require it of him.”

Here, then, is the prophecy. It is the only one in the Old Testament that specifically asserts the prophetic character of the coming Messiah. Was it a special divine inspiration or a deduction from a known law? We are logically bound to accept the latter view if it is found to be within the range of the known powers of the human mind.

To determine this question, we must first refer to the words of the prophecy: "A prophet *like unto thee*." Not a temporal leader like Moses. Not a statesman like Moses. But a *prophet* like Moses. That is to say, he was to be endowed with the same intuitional, prophetic powers that Moses possessed, differing only in degree and not in kind; emanating from the same source, and therefore not from a supernatural source.

The crucial question is, What data did Moses possess from which to deduce a conclusion so momentous as that involved in the coming of a Messiah? For the fact that Jesus did come, that he was a prophet like unto Moses, — that is, that he possessed the same intuitive powers, though multiplied a thousandfold, — together with the historical fact that, because of that and subsequent prophecies, the children of Israel had for more than a thousand years anticipated his coming, invests the question with a scientific interest that cannot be ignored without relegating the whole subject to the domain either of fable or of the supernatural.

It seems to me that the question is easily answered. Moses was a prophet. That is to say, he possessed the power, in an extraordinary state of development, to draw upon the resources of his subjective mind.

He was a man of education, and of vast experience. He had been accustomed all his life to entering the subjective state, and in that state to entering into communion with an intelligence which he believed to be none other than that of God Himself. In that state, through the perfect memory of the subjective mind, he had at his command all the resources of his learning and experience. In that state, his intuitional powers were constantly active and in evidence. In short, he was a man

of genius; for his reasoning faculties were never subjugated to the domination of the subjective intelligence. They acted in practically perfect synchronism. This is what, in those days, constituted a true prophet, as distinguished from those whose reason was dominated and submerged, and who were known by the name of necromancers, and consultants of familiar spirits, otherwise spirit mediums. Under the Mosaic law the latter were punished by death.

These were the powers that enabled Moses to cope successfully with his environment during the forty years of his leadership. He was, of course, aware of those powers, whatever may have been his belief in regard to the immediate cause of their manifestation.

Moreover, he was intuitively aware of the great law of progressive evolutionary development. He was aware from his own experience that those powers were susceptible of cultivation; and he knew the tendency of the Jewish mind in that direction.

What data could be required more ample for the purposes of his prophecy? What visions the dying seer may have had of the perfection of the powers of the coming Prophet, man may not know. But certain it is that the Prophet did come, that his utterances were divine, and that his voice is heard around the world.

Of the later prophecies little can be said; for it is no part of my purpose, in this connection, to make an exhaustive analysis of the Messianic prophecies. Many of them were doubtless inspired by the example of Moses. Some of them were mere enlargements of the original, and others entered into more specific details as to the character and special powers of the coming Messiah. But they seem to have been founded upon

facts that occurred subsequent to the days of Moses. Thus, some of the prophets succeeding Moses developed the power to heal the sick; and this may have moved Isaiah to prophesy that, when the Messiah should come, the blind should be made to see, the deaf to hear, the dumb to sing, and the lame to leap as a hart,—a prophecy that was literally fulfilled.

I cannot refrain from mentioning in this connection one of the most remarkable of all the prophecies in the Old Testament. It was that of Jeremiah (xxxix. 31). I have never seen it classed as a Messianic prophecy. Doubtless it is not so classified for the reason that it does not foretell a coming personality. It does, however, clearly foreshadow the Christian dispensation. But even that is but the beginning of the great consummation which he predicted. It is but the means to the great end that he foresaw. Moreover, it bears the unmistakable stamp of a genuine intuition. Here are the words:

“Behold, the days come, saith the Lord, that I will make a new covenant with the house of Israel, and with the house of Judah:

“Not according to the covenant that I made with their fathers in the day that I took them by the hand to bring them out of the land of Egypt; . . .

“But this shall be the covenant that I will make with the house of Israel; After those days, saith the Lord, *I will put my law in their inward parts, and write it in their hearts*; and I will be their God, and they shall be my people.

“And they shall teach no more every man his neighbor, and every man his brother, saying, Know the Lord; *for they shall all know me, from the least of them unto the greatest of them*, saith the Lord.”

Here are foretold or foreshadowed three events of the greatest possible importance to mankind. Two of them are distinctly foretold.

First, the total collapse of the Mosaic system was distinctly foretold.

Secondly, the Christian dispensation was clearly foreshadowed; for, as we now know, it was by that alone that it was possible to supplant the Mosaic system.

Thirdly, it was distinctly foretold that the time would come when all men should *know the laws* of God. Mark the words: the "law" of God.

Not his will merely; not his personal commands; not his possible capricious decrees; but "*his law.*"

Could words more clearly demonstrate the fact that the prophet was aware that God governs this universe by means of universal law; and that the time is coming when all men will know that law? Man will at least know the relationship which he sustains to God and to his fellow-man.

It could have been nothing less than an intuition, for the great prophet had no data save an intuitive perception of the great law of human progress, — the great law of evolutionary development of the human soul. He had focussed in his prophetic eye a grand panoramic picture of the three great dispensations; the dispensation of Symbols, which was the dispensation of Moses; the dispensation of Faith, which was the dispensation of Jesus; and last of all the promised dispensation of Knowledge, which is just dawning upon the human race.

The Christian dispensation was the outgrowth of the Mosaic in the natural order of evolution. The latter was the only system then existent in which Christianity could have taken root. The germ, the life principle of both, was the monotheistic idea, — the conception of one living God. The name of the man to whose intuitive

perception of truth the world is indebted for that conception is lost in the twilight of tradition. But we know that he must have towered above his generation like a giant oak in a forest of shrubbery.

Think, for a moment, what the world owes to that towering genius, whose intuitive powers were equal to the apprehension of the one grand, fundamental truth which lies at the basis alike of the Christian religion and of Christian civilization.

That it was an intuition is all but self-evident; for science was unknown to the Jewish race in those primitive times; and the religions of the surrounding nations ranged from Polytheism to Fetishism.

The original conception was necessarily anthropomorphic, for that is the natural result of the limitations of human thought and language, especially of the primitive races. It continued to be so during all the ages of the Mosaic dispensation, and was only elevated to its present altitude by the sublime and perfect intuitive perception of Jesus of Nazareth.

As the Christian dispensation was the evolutionary outgrowth of the Mosaic, so is the dispensation of knowledge the natural outgrowth of the Christian dispensation. That is to say, whatever of truth is known in this world, is inevitably destined to become better and better known, by virtue of the law of progressive development of the human intellect.

If there is truth in Christianity, therefore, the Christian world will yet find a way of demonstrating that truth by the processes of induction. When that time comes, then will the prophecy of Jeremiah be fulfilled. Then will the law of God be "*written in the hearts*" of all mankind.

“ And they shall teach no more every man his neighbor, and every man his brother, saying, Know the Lord ; for they shall all know me, from the least of them unto the greatest of them, saith the Lord.”

Christianity will then no longer rest exclusively upon teaching, or preaching, or faith, but upon absolute, scientific knowledge.

Jesus made the same prophecy in his last interview with his disciples in the garden of Gethsemane, when he said :

“ I have yet many things to say unto you, but ye cannot bear them now. Howbeit, when he, the Spirit of Truth, is come, he will guide you into all truth.”

Like the prophecy of Jeremiah, this utterance was prompted by an intuitive apprehension of the great law of progressive development of human reason, as well as of the faculty of intuitive perception.

Each of the apostles knew that eventually reason must be appealed to and satisfied before mankind in general could be said to have the absolute knowledge that each foretold as the heritage of all humanity. And the experience of the nineteenth century demonstrates the perfection of their intuitions. For we all now know that the sublimest intuitions count as nothing to the scientific mind in the absence of the demonstrations of induction.

Jesus especially had an intuitive comprehension of the laws of the soul that was far too accurate and comprehensive to permit us to suppose that he could have predicted a supernatural communication of knowledge. The “ Spirit of Truth,” therefore, could have been nothing else than the spirit of scientific investigation, the legitimate object of which is “ guidance into all truth,”

PROPHECY AS A FACT

It did not, of course, exclude induction. For when the intellect is in pursuit of truth, it is in the path which leads to truth, and truth and error mutually interact. But the intellect is in the path of error, and the intuitive perception is a false suggestion of error, and thus astray, and thus destroys the truth. On the other hand, a great truth once perceived leads to a thousand inerrant intuitions, and it is that the highest intuitions have a comparatively little value, while the lowest have a great value.

It is, therefore, by the inerrant intuitional perceptions that Jesus, will eventually be "put into the hearts" of all humanity, thus that the laws of God, in the hearts of all humanity, will be "put into the hearts" of all humanity.

It must not be supposed, however, that the Pyramid contains the only ancient record of the existence, in the soul of man, of the intuitive perception of truth, and of the inerrant prophecy. The Pyramid, erected by human hands has stood for a thousand years, bearing silent witness to the fact.

The Pyramid of Cheops is not only a record of symbolized science, but it is a record of human events, and a demonstration of the powers of the human soul. Its outside and its proportions constitute a symbolical record of astronomical science which tallies exactly with the

modern scientific measurements and discoveries. It was, therefore, a prophecy; for the science of the day on which it was built was unequal to the correct measurement of any one of the prime factors of its size or proportions. The inside passages and measurements are clearly prophetic of the evolutionary development of spiritual and intellectual man. It traces the course of intellectual empire on its broad lines of development. It symbolizes the three great dispensations. It is, therefore, a Messianic prophecy, and one that is more clearly marked, especially as to the element of time, than any prophecy contained in Holy Writ.

This is a subject so vast, intricate, and interesting, that it requires separate treatment. I cannot refrain, however, from mentioning one fact in this connection, which bears an interrelationship with one of the Messianic prophecies of the Bible; for it seems to throw some light upon a passage that has not been clearly understood.

In Psalm cx. it was prophesied that the coming Messiah would be "a priest after the order of Melchizedek." The Bible says very little about this personage, beyond the fact that he was King of Salem and that he and Abraham met in Palestine. A very plausible theory has been promulgated, showing that Melchizedek, Job, and the builder of the Great Pyramid were one and the same person. Many good and seemingly sufficient reasons have been given in support of this theory. If it is correct, it reveals the reason why the psalmist looked for a Messiah who would be a "priest after the order of Melchizedek." It was natural for the prophets to compare the coming Messiah with their highest ideals. If Melchizedek was the architect of the pyramid, he was

necessarily a famous man in his own country. He was necessarily a worshipper of the one living and true God; and his fame as a prophet and a seer was undoubtedly traditional with the Israelitish nation. This also throws an additional light upon the question why it was that the Jews failed to recognize Jesus as the promised Messiah. Moses had foretold the coming of a prophet like himself; and the Jews looked for a great temporal leader, a ruler, a king.

The psalmist had prophesied a priest after the order of Melchizedek; and the Jews looked for a Messiah who was not only a ruler, but a man of affairs, capable of conceiving and carrying out great enterprises, erecting stupendous structures, weighing the earth as in a balance, and timing the movements of the planetary universe. All this Melchizedek was and did (if he was the builder of the pyramid) centuries before Moses saw the light; milleniums before Jesus was born.

The early prophets, being men, and guided solely by their own intuitions, naturally and inevitably chose their highest ideals as their standard of comparison. Nor could they conceive higher ideals than were exemplified in the sages and heroes of their national traditions.

The common people naturally accepted the standards of their great spiritual leaders; and hence they could not recognize in the meek and lowly Man of Peace, whose kingdom was not of this world, a more sublime character than that of Moses and Melchizedek combined. Hence their refusal to follow in his footsteps; and hence, in a spiritual sense, they have remained on the level upon which he found them. All this is symbolized in the pyramid; and so is the onward and upward march of Christian civilization; and so is the dispen-

sation of knowledge which both Jesus and Jeremiah foretold.

In point of fact the Great Pyramid is a Messianic prophecy of a more pronounced character, more clear in detail, and more accurate as to time, than any recorded in the Old Testament. It is scarcely necessary to remark, in this connection, that the plan of the pyramid had its inception in the intuitions of its architect. There is no other way to account for it, unless we invoke the aid of miracle; for clearly the science of two thousand years before Christ was not equal to it. Nor is it a severe tax upon our credulity to suppose a man to be capable of grasping geometrical laws by intuition, when there are so many modern instances of intuitive apprehension of the intricate laws of numbers.

Nor does it strain belief beyond reason to suppose him capable of grasping the general laws of evolutionary development, when we know that all history is full of evidences of the existence of that power.

I repeat, therefore, that prophecy, in its ultimate analysis, is neither more nor less than the exercise of human judgment. It is reasoning from cause to effect. It is a deduction from known laws, whether the knowledge of those laws is obtained by induction or by intuition.

The accuracy of the prediction depends upon the accuracy of the prophet's knowledge of causes or laws, and upon his individual capacity to formulate correct deductions. If prophecy were the result of direct divine inspiration this would not be true. All prophecy would then be inerrant. But it is true, from the lowest order of the microcephalous fortune-tellers or spirit mediums up to omniscience. I say it reverently, but none the less

positively, that omniscience itself foreknows all events only by virtue of an infinite knowledge of ultimate as well as proximate causes. A positive, unconditioned knowledge of the future is impossible.

I know that I shall shock the prejudice of all lawyers present when I assume that omniscience necessarily foreknows all things. I violate no confidence when I tell you that it is an esoteric, unwritten maxim of law, or of lawyers, that God cannot foresee the verdict of a *petit* jury. I admit that there must be serious difficulties in the way; but we must not be guided by the prejudices of mere human lawyers.

When I say that a positive, unconditioned knowledge of the future is impossible, I mean more than would be implied by simply asseverating that such is the law governing the phenomenon of prophecy. I mean that an unconditioned knowledge of the future is impossible for the same reason that it is impossible for one to be here and at the antipodes at the same moment. The present and the future in time are just as distinctly separated as this continent is from New Zealand. Localities are separated by space; and two localities cannot occupy the same position in space. It would be a contradiction in terms to say that they could. In like manner successive events are separated by intervals of duration; and two successive events cannot happen at the same moment. That would also involve a contradiction in terms. These propositions are self-evident.

It is also a self-evident proposition that the mind cannot take immediate cognizance of two successive events at the same moment. It follows that, of any two or more events, the one that is happening at a given moment is the one that the mind immediately cognizes. Those

that have not yet happened are the ones of which immediate cognizance cannot be taken.

The most difficult task in the whole realm of ratiocination is to prove a self-evident proposition. Such a task is an attempt to prove the existence of matter, space, or time. They are all self-evident, and, logically require neither argument nor proof. Such a task it is to prove that positive, unconditioned knowledge of events that have not yet occurred is impossible. It is a self-evident proposition. Yet we are sometimes compelled to argue each of these questions; for there are plenty of men, and some women, who deny the existence of matter, space, and time. And there are thousands who believe the exasperatingly absurd proposition that neither past nor future exists in time; and hence that the mind can have unconditioned knowledge of events that have never happened.

Let it be borne in mind that I am speaking of absolute, "unconditioned" knowledge of future events. Conditioned knowledge of future events is possible, to a greater or less extent, to every intelligent being. The conditions prerequisite I have endeavored to point out; and I again repeat them with increased emphasis. They are:

1. Knowledge of causes or laws governing the subject matter; and
2. Powers of deductive reasoning.

It will thus be seen that prophecy constitutes no exception to the rule that God governs the universe by immutable laws which are "never reversed, never suspended, and never supplemented in the interest of any special object whatever."

In the meantime, He has given us two means by which

we may acquire a knowledge of those laws. The first is instinct or intuition, — a power which was implanted in the primordial germ, and which has been developed by evolutionary processes until in man its powers are displayed in the realm of the soul. The second is by inductive reasoning. This is the only method by which we can be scientifically certain that we know anything.

Intuition alone is swift, but uncertain, owing to the modifying influence of suggestion. Induction is slow and laborious, but comparatively sure in its results. Intuition finds a limited work to do in this life, but reaches the full fruition of its powers in the life to come. Induction belongs exclusively to this life, though like the poet's eye, it "doth glance from heaven to earth, from earth to heaven."

But whilst it dwells in the prosaic realm of facts, it is in constant communion with the Creator of all things; for it reads his words written all over the face of nature. They are engraved upon the rocks, they are carved in every tree and flower, they are emblazoned in the burnished heavens. And in the soul of man, induction, as well as intuition, reads the record of his divine origin and his title deed to a home not made with hands.

Nor is it by vague dreams and shadowy speculations that this knowledge of the laws of God can be obtained in this age of exact science; but by an intelligent observation of the facts and phenomena which everywhere await our study. Facts constitute the sign language of Omnipotence. Facts are the words of God, addressed to the common intelligence of mankind; and Reason is their divinely commissioned interpreter.

It is upon these that we must, in this life, depend for

our means of acquiring a knowledge of truth for all time to come. The golden days of intuitional perception and prophecy are gone, never to return. We have no occasion to regret it; for we are just entering the promised era of exact knowledge.

Those were days of primitive simplicity. Mankind were in close contact and intimate communion with Nature; and it was to her that their yearning souls appealed for light and knowledge. The starry vault was their open book which declared the glory of God, whose every page showed forth his handiwork. They no longer worshipped nature, or any part of it, as a deity; but looked "through nature up to nature's God."

This attitude, physical, mental, and spiritual, called forth all the latent powers of the soul. The basic conception of the prophets being founded upon the rock of Eternal Truth, — the monotheistic idea, — all their intuitions were in harmony with truth, just in proportion to each one's individual capacity and environment. Being human, their perceptions were sometimes vague and indefinite; but they were oftentimes mathematically exact. On the whole, they have left mankind a rich legacy. They led the van of evolutionary progress on the one line of its highest possibilities, and they left a record of Eternal Truth which modern science can only verify. Their works were demonstrative of the fact that God rules the universe by immutable law, and their lives were illustrative of the God-like powers of the human soul.

XIV

HOW TO PREPARE THE MIND FOR SUCCESS

SINCE psychology has been elevated to the rank of an inductive science, — that is to say, since the psychologist has learned to rely upon facts demonstrable by experiment, rather than upon pure speculation, — the ubiquitous charlatan has reaped a rich harvest in a congenial field. Especially since experimental psychology has, more or less clearly, revealed and differentiated two existing states of human consciousness, the success of the aforesaid charlatan has been unlimited. Taking advantage of the popular recognition of man's mysterious subjective powers, and especially of the now well-recognized fact that he can be healed of his infirmities by the induction of appropriate attitudes of mind, he has assumed and proclaimed that he can mend his estate by the same process. Hence we find the advertising columns of newspapers filled with offers to "treat" the poor for "success," for "prosperity," for "wealth"; offering, in short, to convert every clodhopper into a "Napoleon of finance," and every tramp into a millionaire.

To do such advisers justice, their "treatments" do no harm, and their advice is often good. The latter may be summed up in this sentence: "Maintain, always, a cheerful, hopeful, but determined attitude of mind."

But there is nothing in it either occult or new. Every bootblack has learned that that is the only course by which he can get a job. Moreover, he has learned that the only way to retain a customer is by giving him a good "shine." In other words, he has learned that vitally important business axiom, — that "a cheerful and hopeful attitude of mind attracts custom, and a conscientious performance of duty retains it."

The point I wish to make is that there is nothing occult in the new psychology. It furnishes no new rules for preparing the mind for success. It does, however, explain the secret of the efficacy of the old, and by that means multiplies indefinitely their practical utility. What is of equal importance is that a knowledge of the causes which promote the efficiency of certain aphorisms or rules of conduct also reveals the fact that there are certain other popular aphorisms that are vicious to the last degree. For instance, Shakspeare has inflicted an incalculable amount of injury upon the human race by the promulgation of the following:

"There is a tide in the affairs of men,
Which, taken at the flood, leads on to fortune;
Omitted, all the voyage of their life
Is bound in shallows and in miseries."

It is safe to say that this passage has produced more vagrants and tramps than has any other equal number of words in any language, to say nothing of the innumerable throng of discouraged and disheartened men and women who feel that some early misfortune has caused them to miss the flood tide of their affairs, and that henceforth "the voyage of their life is bound in shallows and in miseries" from which there is no escape but in the grave.

What light does the new psychology throw upon the causes which operate to bring about so much misery and heartbreak from a cause apparently so slight as a belief in a popular aphorism? It shows that the soul of man is governed by the law of suggestion. His whole life is controlled, for good or evil, by the dominant suggestions that find lodgment in his soul. And the most potent suggestions to the average mind consist largely of well-worn aphorisms; for one is apt to regard them as the expressions of fixed laws of nature. Coleridge well expressed a partial truth, and builded better than he knew, when he said: "Exclusive of the abstract sciences, the largest and worthiest portion of our knowledge consists of aphorisms." This is eminently true, — provided the aphorism embraces an undoubted truth. If not, it conveys a false suggestion, which, if followed, tinges one's whole life with false colors, if it does not lead to disaster.

If I were called upon to assist in preparing a young man's mind for success in life, I should begin by asking him to forget the Shakspearean aphorism; for it is as false in metaphor as it is in principle. The tides of the ocean ebb as well as flow; and they do both twice in twenty-four hours. The mariner who misses a flood tide does not abandon his voyage; nor does he deliberately sail into the "shallows," or indulge in "miserics." He simply watches for the next flood. The tide in the affairs of men also ebbs and flows many times during the average lifetime. It follows that, if there is any logical analogy between the two tides, the lesson to be derived is full of hope and not of despair. It teaches that, if, through the mistakes of inexperience, the first flood tide is missed, the next is equally available.

Having taught a young man to forget this Shakespearean fallacy, I would first labor to impress upon his mind the true meaning of "success" in this life. To that end, I should teach him that every child of God has a mission to perform; and that mission is amply discharged if he so lives that, when comes the inevitable hour, he can truly say: "The world is better for my having lived." This is success in the highest and best sense of the word. It may or may not be accompanied by an accumulation of wealth; for under this rule the millionaire may prove a dismal failure, while the humblest may achieve a brilliant success, even though it may consist in "causing two blades of grass to grow where but one grew before." The most successful man that ever lived on earth was the poorest and humblest. He "had not where to lay his head."

Another very important thing is the attitude of mind with which one meets misfortunes. The human mind never framed an aphorism containing a more important truth than this one: "All seeming misfortunes are blessings in disguise." There is but one qualification necessary to render this aphorism of universal validity; namely, one must have performed his whole duty in the premises. That is to say, if he does all that he can, honestly and honorably, to avert a threatened calamity, he will find that, if he yields not to discouragement or despair when the catastrophe comes, it will invariably prove to have been a blessing. Seeming calamities are often the result of one's having mistaken his calling; and it frequently happens that the best part of one's lifetime is spent in a vain search for the work which the Lord gave him to do. But, if courage is not lost, and his career is characterized by industry and integrity, he

is sure to find it at last. He can then look back upon his past life and see cause to thank God for every seeming misfortune, as fervently as for every season of prosperity; for he will then realize that each has constituted a step in the pathway leading to his true sphere of usefulness.

The same rule holds good when one is striving to attain a coveted object of ambition or of emolument. If he does all that he can, consistently with perfect integrity, to attain the object, he may well rejoice at his own failure; for he will certainly realize, in due time, that it constituted an important factor in the attainment of the highest success possible within his legitimate sphere of activity.

All this, as before intimated, is dependent upon the attitude of mind with which one meets misfortune. To use a homely phrase, "he must not lose his grip," if he would transmute failure into success, or snatch victory from the jaws of defeat. On the other hand, the man who "loses his grip," as a result of reverses, is the one who surrenders his manhood to the "tidal hypothesis" of Shakspeare. Necessarily, all the future of his life's voyage "is bound in shallows and in miseries."

The psychological principle involved has already been stated. The trend of the life of each individual is due to the dominant suggestions that find lodgment in his soul. Those suggestions are usually in the form of aphorisms; and they are effective for good or ill in proportion to the tenacity with which they are held. If they are truthful, they are normal and encouraging; if false, they are abnormal and disheartening; for they vitiate thought and poison the psychological fountain of success.