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PROVINCE OF PSYCHOLOGY:

THE

INAUGURAL ADDRESS

AT THE FIRST MEETING, APRIL 14, 1875,

OF THE

PSYCHOLOGICAL SOCIETY OF GREAT BRITAIN,

BY THE PRESIDENT,

MR. SERJEANT COX SURGEON LONGMAN AND CO., PATERNOSTER ROW.

Jr . 14

PREFACE.

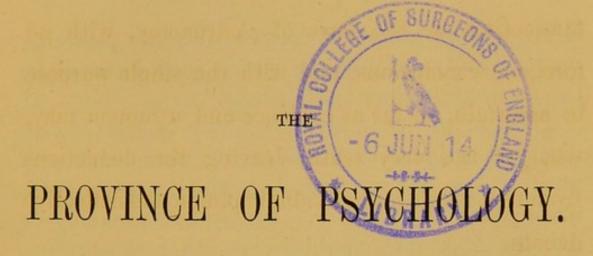
Having but imperfectly anticipated the extent of interest which the Science of Psychology appears to create in the public mind, the Council of the Psychological Society of Great Britain had made very inadequate provision for the Inaugural Meeting to which visitors had been invited. Measuring by the usual attendances at other scientific societies (with the single exception of the Geographical Society), they concluded that ample space for all whom the subject was likely to attract would be supplied by the large lecture room in Conduit Street. Their surprise was great to find every seat occupied long before the hour of

meeting, and it was with regret that they beheld a great number of disappointed applicants departing because unable to find even standing room. It is at the request of those who were thus prevented from hearing it, as of many of those present, that the Inaugural Address of the President is now published.

A very erroneous impression appears to prevail that the Psychological Society of GREAT Britain has been established with a special view to the promotion of a new faith to which the name "Spiritualism" has been given. this was far indeed from the design of the promoters, who contemplate the investigation of the entire field of Psychology, this Address on the Province of Psychology was prepared with express purpose to show how large is the domain which the Society proposes to survey, and how many and diverse are the subjects that will present themselves for its inquiries and discussions. Formed for the investigation of all psychological phenomena, the Society could not exclude from consideration any that profess properly to belong to their Science and that shall be duly authenticated to them by sufficient evidence. The phenomena in question are but a small fraction of the multitude of Psychological facts that will from time to time come to be considered. The following Address presents merely an outline of the various branches of the Science and the problems that press for solution under each of them. The Society will exclude no Psychological questions (save such as belong to Theology), from its collection of facts or its discussions upon their causes.

The Council feel that the best contradiction of this misrepresentation of their design will be found in the following pages, which show that the Society embraces no creed, supports no faith, contemplates no theory, has no latent designs, but proposes only to collect facts and investigate psychological phenomena, precisely as other scientific societies investigate the phenomena of

Magnetism or the laws of Astronomy, with no foregone conclusions, and with the single purpose to ascertain, so far as evidence and argument may, what is the very truth, leaving the deductions from that truth for individual opinion and collective debate.



The Inaugural Address of the President of The Psychological Society of Great Britain (Mr. Serjeant Cox), April 14, 1875.

WHAT is the province of PSYCHOLOGY?

This is the first question to be answered by a Psychological Society.

To make that answer clear, it is necessary to ask and answer another question.

What is matter?

A distinct and definite comprehension of what matter is lies at the very foundation of Psychological Science.

A few words will suffice to make the answer clear to the common intelligence.

Physicists have arrived at the almost unanimous conclusion that the entire Universe is composed of

infinite combinations of certain ultimate particles, inconceivably minute, to which they have given

the appropriate name of "atoms."

These atoms, they say, combining in certain definite proportions, in obedience to some unknown natural law, form molecules, which are the ultimate particles of matter. It may be reasonably inferred that atoms, combining in other proportions, take other shapes than those we recognise as molecular. Molecules are probably but one of many forms into which atoms aggregate. But all the various forms of matter are made by various combinations of molecules.

The human senses are constructed to perceive only molecular substance. All other combinations of atoms than such as form molecules are entirely imperceptible to us. They make no impression upon either of our senses and, consequently, we are

wholly unconscious of their existence.

Matter, therefore, is so much of creation as, because it is of molecular construction, our senses are enabled to perceive. For all the really greater non-molecular part of creation, the multitudinous other aggregations of atoms which take other shapes than molecules, and which make no impression on the human senses, Science has yet found no name—unless the supposed universal medium called Ether is one of them. For lack of a better title we will call it Non-matter.

Matter-molecular structure-of which only our

senses can take cognizance—is but an infinitesimal part even of so much of the Universe as lies within the range of our perceptions. The multitudinous worlds we see with our telescopes are but as so many grains of sand in a sea, compared with the great ocean of space, void to our senses, in which those worlds are scattered.

The proportion of non-matter, which is imperceptible to our senses, to the matter which our senses are constructed to perceive, far exceeds what even figures could express. It is most improbable that those vast interspaces between the worlds of molecular structure should not be occupied by many other combinations of atoms than such as form molecules; but which, if they filled the whole space, and even were thronging about us everywhere, would still be unperceived by and unknown to us because, not being of molecular substance, they can make no impression upon our senses and therefore are not perceptible to our consciousness.

What is a MAN?

All that our senses can perceive is a marvellous mechanism of molecular structure admirably adapted for existence upon a world also structured of molecules. This mechanism is subject to all the forces that control matter. But it is subject also to certain other forces that appear specially to control organic matter.

It is the province of *Physiology* to investigate this material mechanism, to trace the parts of

which it is composed, to find the function of each part, and to observe the effects upon that structure

of the physical and organic forces.

But although this mechanism is subject to the same forces as is all other molecular structure, it is also manifestly moved and directed by another force, distinguished from the physical and organic forces in this, that it is not, like them, a blind force, but an *intelligent* force—acting in obedience to a power, other than itself, that exercises an independent choice of actions.

This intelligent and directing Power is not one of the Physical Forces, for often it acts in opposition to them. It is also a Power existing, if not generated, within the mechanism, whose actions it prescribes although seemingly inde-

pendent of it.

This is the Intelligent Something—call it what we will—be it a form or a force—an entity or a mode of motion—an actual being or merely an influence—which it is the proper Province of

Psychology to investigate.

Assuming it to be an actual entity—something other than a mere resultant from a certain collocation of matter—the Greeks called it *Psyche*, and we have called it indiscriminately—*Soul*—*Spirit*—*Mind*. Adopting for scientific purposes the ancient term *Psyche*, we have the term *Psychology*, which, in plain English, means "The Science of the Soul."

Physiology, therefore, deals with the material structure, with the whole visible and palpable mechanism of Man—whatever of it can be severed by the scalpel, fused in the crucible, subjected to the microscope;—in short, so much of Man as is material—and by "material," I intend constructed of molecules.

Psychology deals with the potencies or entities, whatever they be, whence proceed the forces by which this mechanism is moved and directed, and which, being immaterial—that is to say, non-molecular—are imperceptible to any human sense. True, they cannot be carved, and weighed, and analysed. But their existence is not therefore the less certain nor, as I shall presently attempt to show, less capable of being made known to us and their qualities and functions ascertained.

The province of *Psychology*, therefore, begins at the point at which the province of *Physiology* ends. They are neither rival nor antagonistic sciences, as some have contended, but in truth they supplement each other. Each requires for its full development some assistance from the other; and a perfect knowledge of one cannot be attained without some knowledge of the other.

I hope I shall not misrepresent the argument by which the Materialists dispute the authority of Psychology to be deemed a legitimate branch of science. It is necessary to note their objection that it may be answered and the existence of a Psychological Society vindicated

and justified.

"We can know," they say, "matter, which is perceptible to our senses, and we can learn something of the laws by which it is governed. We are thus enabled to construct a science, that is to say, a systematic scheme of positive knowledge. This is the proper province of Physics, and Physicists have thus a solid foundation on which to build, and actual facts with which to deal, fully capable of demonstrative proof and permitting the formation of probable judgments based upon substantial realities.

"But otherwise it is with you Psychologists." Metaphysicians, Mental Philosophers, and Theo. logians. You try to construct a science without a foundation. You deal not with the real and the actual, with something perceptible to the senses and whose existence is proved. Your subject matter is not merely unknown, it is unknowable. You profess it to be something of which the senses have no cognisance, which cannot be seen, felt, carved, weighed, analysed. Your basis is conjectural and your conclusions are and ever must be conjectures also. It is not permitted to us, as Scientists, to recognise for scientific purposes anything not material. We see in matter "the promise and the potency of every form and quality of life." We know of no existence that is not material. What you call Mind, which has no distinct being to any of your senses-and which even in your own imagination of it has neither form nor substance, and of which yourselves have no definite conception —is to our conception of it merely a function of the brain, for, as the brain is, so is that mind. Thoughts, emotions, ideas, are only states of consciousness, names given to certain sensations that accompany certain conditions of the brain. When life ceases we see that sensation ceases; the brain as well as the body is resolved into its material elements and the man that was is not. But no part of him perishes. The molecules of which he was constructed pass into other forms of being; but the individual consciousness is extinct."

This is, as I read it, the sum of the argument of the Materialists. I have stated it very briefly, but I hope not unfairly, for the limits of this address do not permit of a more elaborate exposition. We may frankly admit its cogency. There is in it much that is calculated to impress the mind, and it is not surprising that it should have found very general acceptance among men of science and obtained a large following in the outside world. The argument seems to be without a flaw and the conclusion to be irresistible—that Psychology is a visionary science—in truth, no science at all, but merely a mass of conjectural deductions from conjectural facts.

Now here it is that Psychologists join issue

with the Materialists and boldly challenge them to proof. We assert with unhesitating confidence that we are dealing with a subject as real, and whose existence is as capable of positive proof, as are many of those which the Materialists investigate. We protest that the potencies with which we deal are as capable of actual demonstration as are the Electricity and the Magnetism of the Physicists. We say that the study of Psychology is to be pursued in precisely the same manner, with precisely the same kind of evidence, and with deductions made according to the same logical rules, as those upon whose sufficiency the Physicists rest their claim to a place among the sciences for Magnetism and Electricity, and for themselves the character of Men of Science.

What is Magnetism? What is Electricity? What is Gravitation? What are Heat and Light? According to the Physicists, they are not substances, not matter, not things. They are only forces, or, to use the favourite phrase of Professor Tyndall, merely "modes of motion." In truth, the Physicists know not what they are. They know of the existence of these forces, be they things or motions, only by the effects they produce upon the molecular substances our senses are structured to perceive. Although these forces are ever passing about us and through us with tremendous energy, we should be ignorant of their presence but for changes they cause in molecular structure when it impedes their passage. We

feel the shock—say, of the electric spark. But what we feel is not the electricity itself, but the sensation caused by the displacement of the molecular structure through which it is flashing and which is an obstacle to its passage. How, therefore, do the Physicists construct their sciences of Electricity and Magnetism? Not by seeing or feeling the imperceptible fluids, if such they be, but by noting the effects they produce upon the molecular structure the human senses are enabled to perceive, and thence deducing conclusions, more or less probable and more or less conjectural, as to the nature of the forces, of whose existence they do not entertain the slightest doubt, although they are not actually known and probably are unknowable.

By precisely the same processes as Materialists employ for ascertaining the existence, the powers and the properties of those unknown and unknowable things, Magnetism and Electricity, do the Psychologists propose to ascertain if there be in the human organism, or associated with it, or in any way controlling it, something as imperceptible to the senses, and consequently as unknown and unknowable, as are Magnetism and Electricity—some entity—be it a force or a thing-such as that we call Life, which is in organic structure only-or that which is called Mind and which is found only in animal structure; and if there be not also something, other than Life and

Mind, that gives to Mind its consciousness of individual being-something that constitutes the Man and yet is distinct from the body of the man, which we call Spirit or Soul. I do not assert now that such things exist—this is one of the many great duties that devolve upon the Psychology of the future—but I say that the existence of these things, their powers and their qualities, are as capable of being studied and may be as accurately ascertained, as are the existence, qualities, and powers of Magnetism and Electricity; and by precisely the same processes as are pursued by the Physicists—that is to say, by observing the operation of the imperceptible entities upon molecular matter which we can perceive. How did Professor Tyndall advance to his discoveries of the characteristics of magnetism? He did not see the magnetic force or fluid, which soever it be. All he saw and knew was, that certain substances under certain conditions were affected in a certain manner. He changed the conditions again and again, until he learned some of the peculiarities of the force he could not see, and thus he arrived at a confident conviction that the force was a real presence, though itself imperceptible, unknown and unknowable, and he ventured upon conjectures, more or less probable, as to the nature and characteristics of that force, or of the entity producing that force.

And in the like fashion it is that Psychology proposes to pursue its researches into LIFE, MIND,

soul, imperceptible though they be, and, therefore, according to the Materialists, unknown and unknowable. By noting the effects they produce upon organised being, with which they are associated precisely as are the physical forces with inorganic being, Psychology not unreasonably hopes to arrive at the same knowledge of the existence and characteristics of these imperceptible producers of the forces that govern organised being, as the Physicists have already obtained of the nature and powers of those other imperceptible entities, Magnetism and Electricity—that is to say, by noting their effects upon molecular matter.

And if this can be done, and I challenge the Materialists to the proof that the analogy is not perfect, a *Science* of *Psychology* is at least as possible as is a Science of Electricity or a Science of Magnetism.

What then is the Province of Psychology?

To investigate all of the forces that move and direct the mechanism of man—Life—Mind—Soul; if they be, what they are, what are their sources, their structures, their powers, their capacities, their functions, their potentialities, and their destinies. It is the study of Man himself, if Man be indeed something more than the material structure that grows from an invisible point to a mature and perfect mechanism, and then fades, perishes, and passes away.

LIFE-MIND-SOUL.

Truly a magnificent field for Science. But how imperfectly cultivated—how strangely neglected! It is difficult to realize the fact that this year of grace, 1875, should witness the germ of the first national association for the promotion of Psychological Science! Great Britain boasts a catalogue of Societies, long established and flourishing, for the investigation of important and unimportant branches of knowledge, all of which have There are done good service in their way. societies for the study of the stars and for the classification of beetles; the relics of past ages are religiously speculated upon by another society; the speech of man engrosses a fourth; the races of man a fifth. But now for the first time is a serious endeavour made to establish an association for systematic and scientific investigation of what Man is-how he came to be-what is the life that moves him-when it began and how-how we move and live-what is the intelligence that directs us—what I am—what you are—if Soul is and what it is, what is its relationship to the body, and what its probable destiny.

The causes of this neglect of a Science so grand, so important and so interesting are not far to

They are seek.

First, a popular impression that the subject of it was properly within the province, not of Science, but of Theology. It was assumed by the unthinking, and asserted as a dogma by the superstitious, that Mind and Soul were for faith, not for knowledge. To search after scientific proofs of them was to question the authority that declared them to be, but properly refused to prove them to be. We have almost outlived that phase of mental darkness, and few of our modern theologians of any creed would now desire to exempt Mind and Soul from the same scientific examination as is given to the body. But undoubtedly the prejudice lingers yet in the public mind and has been and still is an obstacle to the universal recognition of Psychology as a science.

The second cause of its depression has proceeded from the opposite quarter. The Physicists have been and still are more hostile to it than ever were the Theologians—for two reasons; first, because it was claimed as being within the domain of Theology, which the Physicists for the most part reject; and, secondly, because, as already stated, its subject matters are imperceptible to the senses and consequently, as the Physicists assert, belong to the unknown and unknowable and therefore are subjects for conjecture only and not for knowledge.

The third and, perhaps, the most formidable impediment to the establishment of Psychology as a recognised branch of science has been caused by the Metaphysicians and Mental Philosophers. Instead of pursuing the investigation of Mind and Soul, as all other science is now sought, by observation of phenomena and by experiment, they have

persistently limited their inquiries to the contemplation of their own inner consciousness, preferring argument to observation. Only very recently have a few investigators of Mental and Psychical Science endeavoured to pursue it by the collection of facts external to themselves, and by reasonable deductions from those facts. The consequence has been that for centuries mental science has made no progress whatever, while all other sciences have been advancing with giant strides. Not the least of the many uses of this Society will be to prove that the Science of Mind and Soul can be based on at least as many facts and phenomena, and therefore on as secure a foundation, as any of the Physical Sciences.

There has been yet another obstacle to the progress of Psychology which it would be uncandid not to recognise. It has had its open enemies in past times in Theologians, in our own times in the Materialists and the Metaphysicians. But now it has to fear another enemy within its very gates. These are to be found among Psychologists themselves, and the form it takes is incautious credulity. Many of the phenomena are from their very nature strange and rare and often excite wonder as well as curiosity. They are not like the phenomena through which Physical science is explored — the operations of blind forces upon unconscious substances. Mental and Psychical phenomena are for the most part the

action of forces that are directed by intelligence, and the subject of that action is sensitive and conscious. Hence the necessity for the extremest caution in observation, for repeated trial by experiment and test, for careful noting, slow deduction of conclusions, and cautious assertion. It is to the neglect of these precautions by some too hasty adventurers into the field of Psychological Science that it has been somewhat discredited among those whom a more rational treatment would have attracted to its ranks. I cannot pass without remark exhortations to faith which have been openly advanced. It is scarcely necessary to vindicate this Society from sanctioning any such return to pre-scientific ages. Faith has no re- ? cognition in science, which takes nothing on trust. Science is proof, and proof means the best evidence the nature of the subject will permit.

Such being the province of Psychology, as recognised by this Society, and such the methods by which we propose to pursue the investigation of it, allow me briefly to sketch an outline of the subjects that will properly come within the scope of its papers and discussions.

And these may be prefaced with the emphatic declaration that all theological debate, or even reference, will be strictly and sternly prohibited. The reasons for this rule are obvious. We intend by it no slight to Theology, no disputing of its importance, no question of its authority. But it is

a science upon which there is a vast variety of opinion, even among individuals professing the same creed. Authorities acknowledged by one are denied by another. If in the discussion of any question a writer or speaker were permitted to cite an authority which he accepts as Divine, and therefore conclusive, some others, who dispute that asserted authority, would certainly broach other dogmas of their own; and thus there would be an end to that for which the Society is established—the scientific investigation of Psychological questions.

Thus contemplated, how vast and grand is the

territory to be explored!

LIFE-MIND-SOUL.

What is Life? What is its source? Is it the product of certain molecular structure, or is it the parent of that structure? Is it inherent in the molecule, or is it conveyed into the organic structure from without? Is life the same in all organic being, the man, the animal, the vegetable? Where does it begin? Where does it end? Is it created, or transmitted? Does it reside in the whole organic structure, or in some part of it only? Does it cease to be, or is it only transferred? What are the beginnings of the individual life of Man, animals, vegetables? What relationship have they to one another? What relationship has Life to Mind and Soul? Whence proceed Heredity and Hybridism? What are their

Phenomena? What are the laws that govern them?

Intimately associated with these inquiries, and impossible to be severed from them, is the great theory of evolution, and the consequent questions of the Descent of Man, and the Origin of Species which have made the name of Darwin second only to that of Newton, and wrought a revolution in the science of organic nature.

All these are within the proper province of Psychology, and will be open for discussion among us.

MIND is no less fruitful of problems that invite investigation.

What is Mind? Where does it dwell? Is it material or non-material? Is it a function of the brain, or is it something other than the brain, of which the brain is merely the material mechanism? In either case, what is the structure, and what are the functions, of the brain? Is it one homogeneous centre, acting as one whole, having no parts, the entire organ operating in every of its operations, or is it a machine made of many parts, each part having its own special function, and working separately or in various combinations of the various parts, as the requirement may be? Is Dr. CARPENTER right in his contention that the Mind, whatever it be, works as one whole for every thought or emotion? Or is Professor FERRIER right who professes to have proved, by positive experiment, in opposition to the conjectures of CARPENTER, that

different parts of the brain have distinct and definite duties in the control of the motions of the body? For if the body be so directed, it is impossible to escape the conclusion that the mental functions which make the sensations we call ideas and emotions are in like manner performed by distinct parts of the brain. Upon this follows the vast series of questions, still to be answered, what are the various mental functions, and by what part of the brain is

each performed?

Our Society will be required at the very outset of its labours to grapple with the great physiological fact by which Brown-Sequard, the first of living Physiologists, has startled the world, the duplicity of the brain and the consequent duplicity of all the mental faculties. The discovery was not a new one, for nearly forty years ago a book was published by an eminent physician, treating of what he termed "the Duality of the Mind." The conception of this he had not, however, learned, like Brown-Sequard, from inspection of the brain, but by careful examination of mental operations, many of which he showed to be explicable only on the assumption that the mind is not a whole, but a structure composed of parts, many, if not all, of which are in duplicate, as are the bodily organs. GALL had previously demonstrated anatomically that the brain is formed of two hemispheres, having duplicate mental organs, as he termed them, so that, as with the two eyes and two ears, an injury to an

organ in one hemisphere still left the patient with a serviceable organ in the other hemisphere, and capacity for its use, which, though diminished in power, is still sufficient for the performance of the ordinary affairs of life. But, as seems to be the invariable practice, GALL was declared by the Scientists of his time to be a lunatic or an impostor, deluded or deluding, because he dared to assert something not recognised by their then limited knowledge of Nature. They refused even to inquire if his teachings were true; they declared the asserted facts to be impostures or delusions; and thus a knowledge of incalculable importance to humanity was condemned as a heresy and pursued with merciless abuse and ridicule by those who had never even inquired into its truth. As a consequence of this, Mental Physiology continued as obscure and irrational as ever and made no progress. But now that the greatest of living Physiologists has ventured, not merely to confirm these despised investigations of long ago, but to declare, as a positive and proved fact to which he pledges his reputation, that we have actually two minds, each of which can and does often act separately from the other, and bases upon that asserted fact a series of recommendations for the better education of the double mind, this question of the Duality of the Mind can no longer be looked upon as speculative merely, but must be accepted as a fact in Nature. Thus there is opened to the

Psychologist a new and almost boundless field for examination of mental operations, viewed by the new light that will be thrown upon them by this newly proved condition of mental structure.

But all these problems of incalculable interest and importance belong to the investigation of Mind in its normal state, when its operations are performed with ease and regularity and no striking phenomena present themselves to awaken curiosity and arrest attention. We can, indeed, learn very little of the mechanism of any machine, we are not permitted to take to pieces, from a survey of it when all its parts are working smoothly and regularly. when the mechanism falls out of gear, and one wheel grates upon another, and strange motions occur, and its work is done imperfectly, that we are enabled to discover something of the complex structure and the functions of its various parts. Thus it is that we may learn more of the structure of the mental machine in its abnormal condition, when the mechanism is disordered and strange phenomena present themselves, than when it is performing the work of conscious life with regularity and ease.

Therefore, the attention of Psychologists should be especially directed to the various abnormal conditions of the Mind and its mechanism, first, with purpose to ascertain the facts; secondly, to trace the sources of the phenomena; and, thirdly, to discover what light these throw upon the structure

of the machinery and its motive forces. Among the abnormal conditions that will, I hope, early attract the attention of the members of the Society, are:

The Phenomena of Sleep and Dream .- It appears to me that these have been too much neglected by Psychologists. It cannot be that mental conditions so remarkable could fail, if carefully studied, to throw upon the mental processes a stream of light that would advance immensely our knowledge of the methods of brain action and the influences of the forces, mental or psychical, by which it is influenced—especially as that investigation will now be greatly assisted by the recent discovery of the Duality of the Mind, which will certainly explain not a few of the phenomena of dreaming that have hitherto been wholly inexplicable. The nightly recurrence to all of us of these phenomena ought to have made them long ago the subject of a systematic scientific examination by the learned and of eager curiosity to the world. But perhaps it is that the familiarity of the phenomenon has deprived it of its intrinsic interest, and blinded us to its true value as affording the most obvious means for obtaining an insight into the mysteries of mental action. It will be an early duty of the Society to invite the attention of its thoughtful members, and through them of the popular as well as of the scientific world, to phenomena that have been too much neglected, seeing that they offer the most valuable means for the exploration of Mental Physiology.

The Phenomena of *Delirium and Insanity* are fraught with lessons that should form an important chapter in the records of Psychology; for here we see the operations of the Mind and its organ when under the influence of positive disease.

Still more instructive are the Phenomena of Somnambulism, Natural and Artificial. Natural Somnambulism has never been a disputed fact. is universally recognised as an abnormal condition of the mind common at all times and in all The most strange exhibitions are countries. everywhere recorded of it. There can be no doubt that during its paroxysms phenomena have occured whose reality the most sceptical of Scientists has not dared to question; many, indeed, have been recorded by the physicians attending upon the patients. Nevertheless, when the same phenomena were exhibited by somnambules in whom the condition had been artificially produced, the charge of imposture was freely cast upon the patients by Scientists who dared not dispute the phenomena when the condition occured naturally. True it is that there is now an admission that the facts, so furiously denied twenty years ago, are substantially true. Dr. CARPENTER accepts them and endeavours to explain them. It is amusing to note that he uses them to discredit other phenomena

which he now denies as vehemently as his pre decessors denied the phenomena which he now admits. Dr. Tuke, in his excellent treatise on "The Influence of the Mind over the Body," also accepts the phenomena of Artificial Somnambulism as real. But the fact that they have at length passed into the creed of the Profession is a recognition of their importance which should stimulate Psychologists to a more careful and extended investigation than has yet been made of the remarkable phenomena attending that curious psychical condition, with a view to ascertain precisely their features, their sources, and the conclusions to which they point in relation to the Psychical structure of Man. Here then is another wide field for exploration by the Psychological Society.

The curious mental condition to which Dr. Carpenter has given the name of "Unconscious Cerebration" is another problem that courts solution. The facts upon which it is founded are many, but is the explanation suggested by him sufficient? May not the condition he describes be better explained by the Duality of the Mind—that duplicity of the brain, of which I have just spoken? This, too, will be a theme properly for discussion here.

Lastly, we have the most difficult but infinitely the greatest problem of all—Soul.

MIND-Soul.

In common speech, as perhaps in popular con-

ception, Mind and Soul are taken to be identical. Psychology cannot so treat them. Mind may not improbably be the language of the Soul - the manner in which it expresses itself—the medium by means of which in this stage of material existence it communicates with other Souls. also what we call Mind may be the product of brain organization. It is still a moot question, and until it is determined by far more extensive investigation than has yet been given to it, Science must treat of Mind and Soul as if they were different entities —Mind being the term by which we express brain action, and the sensation that action communicates to the conscious self-Soul being the term applied to that conscious self-which receives and takes cognizance of those brain actions, which to it are sensations.

All, moreover, recognise the existence of *Mind*, while many deny the existence of *Soul* as an entity distinct from the body.

Here it will be convenient to state an objection felt by all Psychologists to the terms "Soul" and "Spirit," which carry with them to many minds ideas derived from other popular uses by which certain conceptions are already affixed to them, and which are the cause of continual mistakes on the part of the non-scientific public. The term Spirit has been associated with certain vulgar notions derived from fanciful mythologies and ghost stories. The term Soul has been employed to express a

vague notion of nothing at all. It is too often a word substituted for a definite idea, and employed to hide our ignorance from ourselves or from others. To most minds the conception of Soul presents itself as merely a negation of being; as having neither form, nor shape, nor substance, nor qualities,-in fact, as an idealized nothing. But not such is the Soul which Psychology recognises as a subject for investigation. It seeks for a definite something, and when it speaks of "The Soul" or "The Spirit" of a Man it refers neither to "the spirits" of superstitious story, nor to the inconceivable nothing of the popular mind. Psychology intends by Soul the definite entity which has the consciousness of individual identity and which constitutes the individual Man.

This Society will do invaluable service to its Science if it could invent and procure the general adoption of some name as a substitute for the misleading terms "Soul" and "Spirit" to indicate the special subject of its own investigations and which should be free from the colour given to the popular names by foregone conclusions. Perhaps the term "Psyche" would serve the purpose. At all events it may be employed until some better one is found, and I should venture to recommend its general adoption, as being divested of all foregone prejudices, and as expressing with an appropriate title the intelligent motive force that directs the mechanism of Man. I have already

ventured to give to the Force that is the instrument by which the *Psyche* operates upon the material mechanism of the body and upon the external

world, the title of Psychic Force.

Is it, as the Materialists assert, that Man is nothing more than the material structure perceptible to our senses?—that life is but the product of a certain combination and arrangement of molecules in the special manner we call organic? Is it that Mind-Intelligence-is but an action of that material structure and Consciousness merely a state of that organism? Is it that, when this combination of molecules is dissolved, life ends and with life the intelligence and the consciousness that were also the product of that combination? Or is it that this thing that is conscious is something other than the material organism of which it is conscious? Is the force that moves that complex mechanism self-generated? Is the Intelligence that directs it selfproduced? Or is there not something in our material structure that is non-material—that is to say, constructed of some other combination of atoms than that which makes molecular structure -something that is in fact ourselves, and of which the body is merely the material mechanism through which that non-material something, from the very condition of its being, can alone hold communication with the material world.

This is the first question, surely of over-

whelming interest to every human being, that presents itself to the Psychologist. For a scientific answer to it he must consult-what? Not his inner consciousness, not his hopes and desires, not creeds, not dogmas, not opinions, not conjectures, but facts. He must do as did the discoverers of Electricity and Magnetism, as Faraday did, as Tyndall is doing; he must note the changes in the matter which alone his senses can perceive and seek in the phenomena exhibited by this matter if there be the presence of some entity or force that his senses are unable to perceive. If he finds the presence of some such imperceptible entity or force acting upon molecular structure, whether organic or inorganic, by noting with strict tests and repeated experiments the action of that force he will be enabled to learn much of its nature and qualities, and especially if it be a blind force or an intelligent force.

If it be a blind force, like magnetism, or any of the physical forces, he will be compelled to the conclusion that, like them, it attaches to matter generally and not especially to the individual.

But if he should find, as perhaps he will, that this force is an *intelligent* force—that is to say, that it has a *will* and *knowledge*, and cannot be commanded,—to what conclusion will he then come?

Inevitably that the intelligent motive force proceeds from something as imperceptible to the senses

of the observer as is Magnetism or Electricity. But Intelligence can only proceed from some being that is intelligent—some personality, some entity-call it what you please,-and if this is found to be associated with the individual Man, then the inevitable conclusion will be that Man has in him, or associated with him, some intelligent being other than his material structure.

It is to that intelligent entity, whatever it be, and if it be (which is the problem to be solved), that the name of Soul or Spirit has been given, but to which I prefer to give the name of Psyche, because the former names have been so loosely employed that they convey to the popular mind vague conceptions often differing greatly from that which is designed when they are used in a scientific sense.

If the fact of the existence of a Psyche be demonstrated scientifically, there will follow the scarcely less interesting questions—whence it is? what it is? what is its structure? what its shape? what are its faculties? what has been its past, if it has had a past? what will be its future, if a future be in store for it?

As I have said, the first business is to ascertain precisely what are the facts, and then, by reflection and discussion, to deduce from those facts the reasonable conclusions to which they point.

But facts to be used as the basis of science are not to be hastily accepted. Science has a right to demand that their verity shall be established by evidence which, if not always amounting to positive demonstration, shall be such proof as the unbiassed judgment may reasonably accept. But in all cases the evidence must be the best evidence procurable that the nature of the case will permit. It is an inflexible rule of our Courts of Law that the best evidence only shall be accepted and that secondary evidence shall not be received when primary evidence can be had. It is a rule of reason and of common sense. Its observance is no less essential to scientific investigation, and I trust that by this Society no relaxation of it will be permitted. Necessarily we shall be called upon to deal with some reports of alleged phenomena of rare occurrence and transcending common experience. It is scarcely necessary to remind the members that a higher degree of proof should be required in proportion to the strangeness of the phenomenon and that strictest scrutiny must be made into the minutest details before the Society will be justified in giving to it a place among its records of psychological facts. The sufficiency of the applied tests must be examined—the accuracy of the observations must be tried-and, above all, it must be ascertained if there were not other more conclusive tests that might have been appliedtests that would have exhibited the truth or the error beyond dispute? and the question must always follow-If these conclusive tests were not tried, why not?

Having thus a firm basis of fact upon which to proceed, discussions upon causes will properly follow and these will involve problems of supreme importance, any one of which should suffice to attract to this Society every man who gives thought to the questions what he was, what he is, what he will be? Whence did I come? Where am I? Whither shall I go? We stand between two Eternities-the Eternity of the Past and the Eternity of the Future. We have emerged from the one and we are travelling into the other. Did we exist in that past Eternity? If so, where and how? What shall we be in the Eternity to come—and where? What is Soul? What is Matter? Is Matter merely the incrustation of spiritatomic structure aggregated into molecular structure on the surface, as it were, and passing continually from one to the other—as the atmosphere becomes visible in the form of a cloud when it comes in contact with a colder body? Or is it that the vast interspaces between the worlds, those regions void to our senses, in which those countless worlds are but as grains of dust, are really thronged with life—possibly with intelligent life-which, because it is not of molecular structure, is imperceptible to our very limited material senses? Can it be that the spacious firmament on high, and even our atmosphere, is tenanted by races of beings whom we cannot perceive with any sense. perhaps not even our equals in intelligence, by

whom some of the acts are done which undoubtedly are performed by no corporeal hands? Or, is it, as some contend, that the agents or their phenomena are the disembodied spirits of men and women like ourselves, who have passed away from mortal life but not from mortal interests and regards? there for us another existence when this has closed? Where? In what conditions? Are we to preserve our individuality? If so, have we lived in the past? How? Where? When the mechanism that has served it or clothed it falls to ruin, does the disembodied Soul revive the recollection of its past existence, or, if more than one, of all its past lives? These are a few of the profoundly interesting questions that present themselves in this single branch of Psychology.

But I might occupy another hour in a mere enumeration of the various questions that are offered to the view even by so hasty a glance as this of necessity must be over the Province of Psychology. I have stated some of the foremost of them only, but enough, I hope, to satisfy the most sceptical that there is a vast and as yet almost unexplored realm of Science open to such a Society as this. To reap the full harvest of investigation there cannot be too many explorers and we invite all who take an interest in these questions to come and join us in the search.

The process by which we propose to conduct the exploration of this so rarely visited region will

be, first, by collection of facts and, secondly, by discussion upon them with purpose to trace their causes and consequences. Our primary endeavour will be to secure authenticated reports of all Psychological phenomena, and to subject whatever may be presented to our notice to the severest scrutiny, so to ascertain, if possible, what claim it has to be received and registered as a fact.* We hope that, such being our avowed

^{*} In the discussion that followed this address the pertinent queswas put to me—"What do you mean by a fact? What is a fact?"
I answered that the term "a fact" is here used in contra-distinction
to a conjecture, or a bare assertion unsupported by any evidence. A
fact, in the scientific sense, equally as in legal contemplation and in
common sense, is anything, or any state or condition of anything,
the existence of which is proved by evidence. A fact cannot properly be accepted as such without proof, that is to say without
evidence of its being. There are, and ever will be, differences of
opinion as to what evidence is sufficient to prove a fact, but no proof
can be admissible for the purposes of Science which is not also
sufficient for the common purposes of life.

But alike for scientific and for social purposes, we must be content with what is called relative truth—by which I intend that which appears to be truth according to our mental structure. It is merely a waste of time and thought to hunt after absolute truth. We can only know according to the conditions of our being, and we must be content to assume that things are as they appear to be to our cultivated senses and intelligence. For instance, it may be, as some philosophers have contended, that there is no objective existence, that the world is all within us; that there is no correspondence between our mental perceptions and the things we suppose ourselves to perceive. But it is sufficient for all the purposes of existence in this world that we treat as real what our senses inform us as existing, especially if

purpose, no person, however great his authority, will take offence if we subject him to the most severe cross-examination upon any asserted obser-

we find that the senses of others convey to them the like impressions. Absolute truth being unattainable, we must be content with relative truth; and if this were once recognized, there would be an end to a world of worthless controversy. It suffices for every purpose of mundane existence to accept the external world as a fact. I may be a mere illusion of your mind, you may be an illusion of my mind; but so long as we both agree in recognizing the existence of each other, we may treat and think of each other as objective realities, and set ourselves down as facts in Physiology and Psychology.

The degree of proof requisite for the establishment of a fact is a fair question for discussion, and it must certainly vary with the various characters of the facts to be proved. There is no great difficulty in determining this. It is done hourly by all of us in the common affairs of life. More difficult questions are decided daily in our Courts of Justice by common minds exercising their common sense. A fact cannot be proved argumentatively whether in Science or in law. It must be something of which the senses have taken cognizance. The fallacy that most seriously impedes the recognition of facts prevails very widely, and quite as much among Scientists as with the uninstructed. It is the consequence of the prevalent habit of not separating the fact from some real or imagined cause of it. If, for instance, before the discovery and investigation of magnetism, five persons had said, "We saw a bar of iron mount in the air untouched and attach itself to a stone held above it," the Scientists of that time would certainly have said, "We do not believe you; it is contrary to the laws of nature for a heavy body without life to rise and float in the air. It is contrary to common experience. You were dreaming, or some conjuror was deluding you. You are either fools or knaves." If the witnesses had said "But we all saw it at the same time, and it was repeated several times. Come and see, and try it," the Scientists would vations, seeing that we have no other desire nor design than to discover the very truth. When important occasions demand, we shall appoint Committees of Inquiry to examine, and test, and report results. But opinions and speculations based upon the facts we shall receive from all quarters and on any side of any question, if only they be temperately advanced.

Should the growth of the Society in numbers permit, we contemplate the periodical publication, not of a mass of essays, but of *Psychological Facts* collected from all parts of the world, which being first duly authenticated, will be narrated without note or comment, so that Science may possess, what it has long wanted, a storehouse

of facts to which Psychologists everywhere may refer when laying the foundation of any branch of their Science, instead of indulging in the

have answered then, and doubtless did answer, for the history of Science has been one long tale of the same fallacious argument à priori—"it cannot be" confronted by the fact that it is. "We will not waste time in viewing what we know to be impossible. If we saw it we should not believe it. We should rather conclude that our senses were deceiving us than that a law of nature should be violated." Still this fallacy prevails of not separating the fact from the causes of the fact—first ascertaining the fact and then tracing its cause. Instead of inquiring if the steel leaped to the magnet contrary to the law of gravitation, and then investigating the cause, and whether it was a trick or a hitherto unobserved phenomenon, they preferred to deny the fact of the motion itself. And as it was, so it is, and probably will ever be.

fascinating amusement of conjecture and surmise, which hitherto has been the almost unavoidable practice, by reason of the absence of any reliable work in which the authenticated facts were to be found collected. When permitted, the names of the reporting authorities will be given; when this is objected to, the Society will investigate authority and guarantee that the facts have been duly authenticated to itself. Thus limited strictly to the recording of phenomena, and wasting no space on mere disquisition, there can be no doubt that this publication, when the funds of the Society shall permit the enterprise, will be one of the most interesting, instructive, and valuable works ever presented to the scientific library.

That its researches may have the largest possible range, the Psychological Society of Great Britain will welcome as Honorary and Corresponding Members the Psychologists of all other countries, who will be invited to send reports of Psychological Phenomena coming within their own observation, and to enrich its discussions with papers on themes properly within the province of the Society.

Regulations will be framed for the ordering of the Meetings, limiting the length alike of papers and speeches. This is found to be a necessary rule in all Societies where discussion is desired. It will be especially requisite in this, where the subjects to be discussed are of such transcendent and universal interest, and on which almost every member will have formed some opinion of his own which he will doubtless desire to express.

The Council have resolved carefully to limit expenses to means, and from a small beginning they hope and expect that the Society will grow to greatness. Ultimately we hope to possess a local habitation, to collect a Psychological Library, to open a reading room, and have a paid officer to conduct our business.

The subscriptions now paid will extend through the current year. Of necessity the first officers of the infant Society have been self-appointed, but it must be understood that they hold office only provisionally, until the commencement of the Second Session, when the election of the entire body, including the President, will be relegated to the members.

In conclusion, let me express a hope that the press will give to our labours so much of its good will as to regularly notice the proceedings of this as of other scientific Societies. The members must not be disappointed if the columns of certain journals who affect to lead literature and science should be closed against them for some time to come. Truth must still be content to fight its way by its own force, as always it has done before. It is often easier to gag an opponent than to answer him.

But we have always this assurance—that we propose to build our science of Psychology on the firm foundation of fact. Theories may be exploded by argument, but no argument will answer a fact. Deductions from facts may be disputed, and are often disputable, but the fact remains as before. No amount of logical contention that it cannot be changes for an instant the position of the assertion that it is. Facts can be refuted only by investigation, by experiment, and by positive proof that their supposed existence is a dream or a delusion. No power on earth can destroy a fact. No force of king or populace—no denunciation of dogmatists, scientific or sacerdotal-no reasoning à priori, however ingenious—no sneer nor jeer of conceited ignorance, nor jokes of jack-puddings, can extinguish a fact. To all such impotent endeavours Science will still return the same response with which the astronomer of old accompanied the forced recantation of his scientific heresy of the revolution of the earth, "But it moves nevertheless!"

