A Philosophy of Psychiatry.

By BERNARD HART, M.B., M.R.C.S., Assistant Medical Officer, Long Grove Asylum, Epsom.

"What we gain from speculative philosophy is not so much answers to questions which common sense universally asks, as the knowledge that these questions themselves, since they are based on untrue concepts, must vanish away."—PAUL MÖLLER.

PSYCHIATRY has the unenviable characteristic of containing within its borders more diverse and conflicting opinions than any other branch of science. These disputes relate not only to the conclusions reached by different authors as regards matters of theory or fact, but also to the method of research, and even to the material with which the subject deals. This is so obvious, that if the numerous existing text-books are carefully compared it is hardly possible to realise that they profess to deal with one and the same subject. Metaphysicians and materialists, psychologists and clinicians ride their particular hobby horses, and produce a number of diverse schools whose parallel is only to be found in the history of philosophy.

In modern times the goods and evils of specialism have made themselves much felt, and psychiatry is advancing along numerous very distinct paths. Unfortunately, those who are engaged in a particular line of research are too often afflicted with panaceaism, and regard with open or only partially-veiled contempt the efforts of other workers along other lines. Psychologists and pathologists proceed in happy ignorance of each others' work, or at any rate with wonderfully naïve ideas concerning the inter-connection of their various spheres. While Professor Janet in Paris is publishing psychological masterpieces which give one the impression that a powerful searchlight is being thrown into the dark places of insanity, an anonymous writer in the *Times* condescendingly informs the lay public that he "cannot help regarding psychology as an *ignis fatuus*."

By certain pathologists the view that mental diseases are *really* brain diseases, and that anatomy and physiology are the only routes by which they can be properly attacked, is regarded as a self-evident truth. The brain constitutes a part of reality, something which really exists and is causally effective, whereas psychological research deals with flimsy unrealities. Advance

except by way of the microscope and test-tube is a fraud and delusion.

The psychologists, on the other hand, take refuge in Plato, Bishop Berkeley, and Tyndall's much-quoted Belfast address. They insist that mind is the immediate and therefore the only real fact, and they tend to ultimately lapse into a view even more one-sided than that of their opponents. These divergent opinions are really the result of a more or less conscious endeavour on the part of men skilled in the conceptions of a particular branch of science to apply those conceptions to a far wider sphere of being. In other words, we have dogmatism in the sense in which it was originally defined by Kant (1).

Now, in this country, and to a large extent in Europe also, the preponderating dogmatism is undoubtedly the physiological, and the pathological laboratory is the hub of the asylum universe. The growth of this conception forms an important chapter in the history of psychiatry, and some profit is to be gained by a consideration of the various factors which have contributed to its popularity. Historically the physiological conception arose as a reaction against the theological and metaphysical explanations of the middle ages. Its progress was materially assisted by the rapid growth of the physical sciences and the endeavour to bring all experience into line with them. In an age when psychology was confounded with metaphysics and regarded as a subject essentially opposed to the methods of science, it is easy to understand the strenuous attempts to bring insanity within the pale and make it conformable to the laws of physiology. Psychology was then in its armchair stage —the student was expected to sit down and evolve the subject from the depths of his own mind by a process of introspection. Observation and experiment, the methods of the natural sciences, were not considered to be applicable, and it was obvious that any attempt to understand dementia præcox by a process of introspection would be singularly unsuccessful. An attack upon insanity from the psychological point of view has only become possible with the development in modern times of an objective psychology working along the lines of the other sciences.

If we endeavour to trace to its essential basis the narrow conception that anatomy and physiology are the only routes by which insanity may be properly approached, and that the brain

is the reality underlying it, we find the naïve idea of reality as something extended, tangible, and visible, and the assumption that science is essentially concerned with measurement, and therefore only applicable to the material world. These two propositions, whether they be expressed or implied, form the kernel of what we may call the doctrine of physiological dogmatism. If, therefore, we would determine the relation of the latter to modern thought, it is necessary to inquire what measure of validity is to be ascribed to the two conceptions in question.

Now the view that science is concerned with an external "real" world of "things-in-themselves" composed of extended objects arranged in an infinite space, was at one epoch very generally accepted. It may be said to have reached its *reductio ad absurdum* in the materialistic writings of Büchner (2) and Moleschott (3) in the middle of the nineteenth century, and it is now discredited by modern thinkers. It was the prevalence of doctrines of this nature which aroused Mach's gibe, that 'Every philosopher has his private natural science, and every natural scientist has his private philosophy. The majority of natural scientists, however, tend to embrace a materialism some hundred and fifty years old, whose insufficiency has long been obvious, not only to the philosophers proper, but to all those accustomed to think philosophically" (4). Scientists, fully occupied in constructing the magnificent edifice of empirical knowledge, had paid but little attention to the foundations upon which they were building. The practical value of their work was so evident that objectors could be silenced by the retort that the proof of the pudding lay in the eating. The primary assumptions of science were left to take care of themselves, until physicists suddenly awoke to the fact that they had been guilty of the grossest metaphysics, and were in danger of becoming even more metaphysical than the philosophers. Obscurantist attacks, which had formerly been vainly directed against the results of science, were now turned against its postulates, and the evidently vulnerable character of the latter made the need for some refurbishing acutely felt. Hence there arose a school of critical philosophy which, though its roots may be traced back to Kant, has attained its main development during the latter part of the nineteenth century. It is unique amongst philosophical creeds in the fact that its chief exponents have

been men eminent in the scientific world—Clerk Maxwell ([5]), Ostwald ([6]), Mach ([7]), Karl Pearson ([8]). Pearson's *Grammar of Science* remains the finest vindication in the English language of the principles, methods, and aims of modern science. The short exposition which follows is an endeavour to cull the essential points from its pages. But limitations of space prevent more than a short summary of the principal conclusions being given, and for the demonstration of their validity the reader must be referred to the original work.

Science is characterised, not by its content, but by its method of investigation—it embraces the whole field of knowledge, and is as applicable to history as it is to chemistry. It deals, not with a fabulous entity called "matter," but with the content of the human mind, and acknowledges its incapacity to deal with anything which forms no part of that content. The material of science is therefore human experience, what James calls "the flux of sensible reality." In other words phenomena, of whatever sort or kind they may happen to be, constitute the material, while science is simply our method of treating this material. Now it is found that human experience does not take place in an entirely haphazard and chaotic manner, but that the events follow one another with more or less regularity and order. This is the principle of the uniformity of nature. The aim of science is to find a means of proceeding from one point of experience to another with the least exertion of mental energy, in other words to achieve an "economy of thought." Its method is firstly to take some portion of human experience and to classify the facts found therein into sequences; secondly to find some simple statement which will resume an indefinite number of these sequences in a single formula. Such a formula constitutes a scientific law. The law is the more fundamental the wider the range of facts which it resumes. It is not a mythological entity; it is merely a construction of the human mind to enable it to deal better with its experience. If we examine any scientific law in order to determine its essential nature, we find that it has no immediate reference to sense-impressions, or in other words to phenomenal reality, but is purely ideational or conceptual in character. The meaning of this statement will be made clearer by taking an

example, *e.g.*, Newton's law that "Every particle attracts every other particle." Now a particle is not a sense-impression; it is defined as an infinitely small portion of matter, that is to say, a pure idea, formed by carrying what is given in sense-impressions to a conceptual limit in the mind. "Newton is here dealing with conceptual notions, for he never saw, nor has any physicist since his time ever seen, individual particles, or been able to examine how the motion of two such particles is related to their position" (9). Similarly geometry, with its points, straight lines, and surfaces, is dealing with entities which are frankly acknowledged to be conceptual in character, and to have no real existence in the world of sense-impressions. The physical conceptions of the atom and the ether are precisely analogous in their nature. We find, therefore, that science does not profess to mirror some hypothetical universe lying altogether outside the human mind, but simply to provide a conceptual model, a "conceptual shorthand," by aid of which we can resume our sense-impressions and predict future occurrences. "The physicist forms a conceptual model of the universe by aid of corpuscles. These corpuscles are only symbols for the component parts of perceptual bodies, and are not to be considered as resembling definite perceptual equivalents. . . . We conceive them to move in the manner which enables us most accurately to describe the sequences of our sense-impressions. This manner of motion is summed up in the so-called law of motion." We therefore reach the conclusion that science is simply a mode of conceiving things. The justification of science lies precisely in the fact that it does enable us to resume our sense-impressions and predict future occurrences; its value as truth lies in its value as a working hypothesis by which we may become the masters of phenomena.

Now there may be more than one mode of conceiving the same things, and which mode we adopt may depend on the practical necessities of the moment. Thus the mathematician insists on regarding bodies as bounded by continuous surfaces, whereas the physicist is compelled to regard them as bounded by discontinuous atoms. Neither of these modes is more *true* than the other; the question is merely which one has the greatest practical value in the particular sphere of thought in question. The old absolute conception of truth has no

meaning for modern science; truth is regarded as relative; it is no longer a static but a dynamic concept ([10]).

Armed with these conceptions let us now direct our attention to those fields which more particularly concern us, and firstly let us consider the problem of the physical and the mental. What, in fact, is the difference between physics and psychology? We are usually told that there are two orders of phenomena, the physical and the mental, two series which are so qualitatively different that the passage from one to the other is unthinkable. Concerning the relation between these two series innumerable philosophical battles have been waged, and science must approach the question with a due regard for the metaphysical quicksands which await her on every side. It was pointed out by Bishop Berkeley that sense-impressions are the only things of which we have any immediate knowledge, and modern science, having with some difficulty duly digested this fact, has discarded the pretence that it is engaged in a research into "things in themselves," and has relegated the latter to the limbo of useless figments. Being entirely pragmatic in its ideals, and having a criterion of validity measured solely by utility, it recognises that its field is the content of the human mind, neither more nor less. The modern scientist cannot therefore be accused of sharing the vulgar conception that "reality" consists of "material substance," which by means of "energy and force" acts on "spiritual substance," giving rise in the latter to "sensations" which mirror the external reality. What then does he mean when he distinguishes between the mental and the material? The answer is that he means two different modes of *conceiving* human experience. On the phenomenal plane the physicist and the psychologist are dealing with precisely the same entities, sense-impressions; the distinction between them lies in their different conceptual methods of resuming these sense-impressions so as to express them in simple formulæ. The physicist resumes his sense-impressions by means of a conceptual model involving space and time, whereas the psychologist regards them as actual or potential constituents of a consciousness. As Mach ([11]) puts it, there is a "change of direction" in their methods of research. The ultimate goal of the physicist is a complete description of the universe in terms of motion or mechanism, the ultimate goal of the psychologist is "personality." Neither method is

in itself better, more perfect, or more *real* than the other; a comparison between them can only be made on the grounds of utility. We are only entitled to ask by which method we are better enabled to resume our experience of the past and to predict our experience of the future. And the only answer to this question which it is possible to give in the present state of knowledge is that both methods are of value, and that neither can be abandoned in favour of the other. Whether mechanism or consciousness will be ultimately found to provide a better description of phenomena is a problem which the future alone can decide. It may at least be conjectured, however, that the perfect conceptual description of the universe will be of a type essentially different from both, an all-embracing concept from which mechanism and personality may be deduced as particular examples.

For the present the physiologist and the psychologist must be allowed to proceed along their respective roads. But there must be no jumping from one mode of conception to the other. The physiologist must not introduce a psychological conception into his chain of cause and effect, nor must the psychologist fill up the gaps in his reasoning with cells and nerve-currents. The former error is comparatively rarely met with, the latter is unfortunately only too common. No physiologist would consent to admit "ideas" as active elements in the sequence of changes which take place in the nervous system. He simply points out that he has no use for such a conception, and that, so far from helping him in his explanation of phenomena, it vitiates his reasoning, and destroys the validity of all his former concepts. The psychologist, on the other hand, is a weaker vessel; he less commonly belongs to what James has termed the "tough-minded" school of philosophy. He is usually prepared to humbly admit that the phenomena of memory are adequately explained by the potential physical energy of a brain cell, and does not venture to suggest that the potential psychical energy of an idea is a conception just as valid, and with precisely the same claim or lack of claim to real existence.

Now, if psychology and physiology are two different modes of conceptually describing the *continuum* of human experience, we see at once that there is room for another body of knowledge, a description of the correlation existing between the two

conceptual series. Such a science actually came into being with G. T. Fechner ([12]), and under the name of psycho-physics has attained a considerable development during the past fifty years. From its very nature it is obviously dependent upon the perfection of the psychological and physiological conceptual systems which form its material—and for the insufficiencies of psycho-physics the insufficiency of psychology is largely to blame. The amount of importance to be assigned to psycho-physics is a question of peculiar interest to the alienist, for the validity of the "clinical method" is to a large extent dependent upon its solution. This point will be subsequently discussed.

We must now consider what meaning we are to ascribe to the term "insanity." Amongst the laity there is an almost universal belief that insanity is a definite morbid entity analogous to typhoid fever. We smile at the fond wife who pathetically insists that her husband is not insane, but is only suffering from "nervousness." Nevertheless the profession is by no means exempt from reproach in this respect, and grave consultations are held to determine whether a patient is suffering from hysteria or insanity. Now if we carefully examine what is meant by insanity we find that its connotation is so shadowy and indefinite as to be almost meaningless, and that it denotes a group of individuals who have hardly anything in common. Perhaps the best possible definition of insanity is expressed in the motto of a certain asylum magazine: "We do not all think alike." An individual is said to be insane if his mode of thought differs in quantity or quality from the normal. Normal, however, is here a very elastic conception, and means little more than the vague limits between which the majority of men do think. The little more which it does mean is practically deducible from this definition. On the principle of natural selection the mode of thinking adopted by the majority of men will be one more or less in relation with reality, that is to say, a mode which will enable the thinker to appropriately dip into the *continuum* of sensory experience, in other words a mode which will enable him to adapt himself to his environment. The mental processes of the insane, which differ from those of their fellow men, are therefore usually less efficient in their relation to reality. A genius, of course, thinks differently from the vulgar herd, but differs essentially from the insane in the relation of his thoughts to reality. Nevertheless, the

distinction frequently does not save him from being regarded as insane by the less plastic among his contemporaries.

We have seen that the concept "normal thinking" is remarkably elastic. As a matter of fact, it is to a great extent a function of the environment. Thinking which is normal and adequate in one environment is abnormal and inadequate in another, and there are numerous individuals who betray no mental abnormality so long as they are not subjected to any unusual stress. A man may therefore be considered sane in one environment, insane in another, according to the less or greater amount of adaptation required from him.

Insanity is, in fact, a legal and sociological term; it denotes individuals belonging to the anti-social group. It is impossible to find any reasonable line of demarcation between insane, criminal, and immoral. Formerly the insane were treated as criminals; we are now slowly but surely approximating to the point of view which regards criminals as insane.

If the meaning of insanity is so vague and ill-defined we must be content to assign an equally vague and ill-defined province to psychiatry. The territory with which it professes to deal is so vast that the futility of drawing conclusions with regard to insanity as a single entity is obvious. The psychiatry of the future will form an essential basis for history, sociology, and politics—but that it is destined to be subdivided and specialised to an enormous extent is beyond question. Now, with this fascinating vista opening before us, what are the available methods by which we may hope to further our knowledge? First and foremost we must guard against the wiles of the panacea-monger, against every attempt to enclose our science within the narrow limits of dogmatism. And here we run at once against the most cherished dogma of the alienist, the opening statement of almost every text-book: "Insanity is a disease of the brain." It cannot, of course, be denied that this formula has been of enormous utility in the past. As a weapon of reform against the theological and metaphysical conceptions of the middle ages it led to the most notable advances which psychiatry has yet made. It still remains the basis of some of the best scientific work of the present day. But to regard this conception as a unique and ultimate end, to argue from it that the field of psychiatry must be reduced to a single path, is totally unjustifiable. The statement that

insanity is a disease of the brain is a physiological conception; whether it is adequate to describe the phenomena observed is a question for physiologists to decide, and whether it can be ultimately brought under the wider conception of mechanism and treated as a particular example of the laws of motion is a question which physiologists and physicists must decide between them. But we have seen above that physiology is only one method of conceptually describing the sequences of human experience; the claims of the psychological method must also be allowed, and it is mainly to emphasise the importance of this other aspect of things that the present paper has been written. Nevertheless, it is necessary to avoid exaggeration, and we need only show that physiology is a limited method of describing actual phenomena, that it must not be regarded as the only talisman with which we may approach the study of insanity, and that its claim to a unique appropriation of the *real* is based on crude and naïve conceptions totally foreign to the spirit of modern science. As Janet remarks: "S'il faut toujours penser anatomiquement, il faut se résigner à ne pas penser du tout quand il s'agit de psychiatrie." To deny, however, that physiology is a genuine and potent method of research would be merely foolish. The only test of scientific truth is utility, and judged by this standard the accomplishments of physiology are amazing. It has so many champions that there is no need here to discuss its use as a method in psychiatry. But it is necessary to emphasise the point that the physiology of insanity must proceed by means of physiological conceptions, and must not juggle with the psychological. No useful purpose is served by constructing a diagrammatic representation of a psychological conception, and then proceeding to translate its points into brain-cells and its lines into nerve-fibres. Yet this mode of dealing with the problems of insanity is extraordinarily common, and, curiously enough, its perpetrators regard it as a genuine scientific advance. It would be as reasonable to suppose that a French riddle is solved by translating it into English. In order to achieve any solid contribution to knowledge, pathologists must practically neglect mental symptoms altogether. What can be done in this way is illustrated by Dr. Bruce's *Studies in Clinical Psychiatry*. Physiological sequences are studied by means of physiological conceptions, and lead to physiological therapeutics—aimless

psychology is rigidly excluded, and the result is a book which gives an impression of solidarity and coherence totally different from that produced by the ordinary hotch-potch.

A similar rule must be observed when dealing with the psychological conception of insanity. To remark in the middle of a psychological discussion that a certain phenomenon is due to a toxin acting on the cerebral cortex is no explanation at all. It is merely a lapse into a language which, for the purpose in hand, is entirely meaningless. Yet an irrelevant use of physiology is characteristic of a large number of psychological writers. The conception of the "subconscious" has been a most potent weapon in enabling us to comprehend abnormal mental phenomena, and is now established on the most solid grounds. But there is a school of thought which, while admitting that the concept must be used in a purely psychological manner, insist on regarding it as a brain fact and not as a mind fact. This is an example of confusion between the two conceptual methods.

Certain statements in the last paragraph require some qualification. It will be at once objected that the clinical method, which the alienist rightly regards as his most efficient weapon, is compelled to introduce both physical and psychological conceptions into the same train of thought. Thus we observe that an excessive dose of alcohol is followed by the mental symptoms of intoxication, and that a patient with typhoid fever is liable to develop that affection of consciousness which we term "delirium." If we accept the general principles enunciated above, are we justified in thus mixing the physical and the mental? The answer to be given to this question depends entirely upon our point of view at the moment. We are fully justified in saying that certain toxins cause mental confusion if we clearly realise that we are merely recording the succession of certain events in time, and not insinuating the existence of a causal relation. In order to make this statement clearer we must consider for a moment the philosophical meaning to be ascribed to the word "causation."

Let us first note that clinical observations of the kind mentioned are possible, because all human experience takes place in time, and the temporal character also adheres to both the physical and mental concepts by which we resume this experience. Hence it is possible to resume one portion of experience

by a physical concept, another portion by a mental concept, and to record the fact that the one precedes the other in time. This is precisely what we do when we say that a toxin causes mental confusion.

Now, Höffding ([13]) states that "The causal concept appears under two aspects: under a provisional, elementary form, with which we are often compelled to be content; and under an ideal aspect which all research and all theories strive after. *The elementary causal concept* presents only an unconditional succession: if the phenomenon A appears, then B inevitably follows, and B only appears when A has preceded it. It is not asserted that the causal relation holds between A and B themselves. It is possible that they are both the successively emerging consequences of a previous cause. *The ideal causal concept* goes a step further and sees in the phenomenon, which we call the consequence, the *continuation* of that phenomenon which we call the cause, or its equivalent in a new form."

It is in this latter sense that causation is taken in all exact scientific work. Now if we say that a toxin causes mental confusion we are using the concept of causality in its first or empirical, and not in its second or ideal form. It is impossible to conceive of a mental state as the *continuation* of the collection of atoms termed a toxin. If, therefore, we are proposing to do exact scientific work, we must endeavour to work out the mental state as the resultant of the preceding mental state, the bodily conditions as the result of the preceding bodily conditions. We are accustomed, for instance, in every-day life to say that the idea of a meal makes the mouth water. But for the physiologist this statement has no meaning. He is ready to show how a certain impression on the retina by means of neural connections causes an increased secretion of saliva. But if you insist on introducing an "idea" into his causal series you destroy the fundamental postulates on which his science is built. Similarly, psychology cannot form itself into a science by endeavouring to weld into a causal series the totally disparate conceptions of toxins and mental states. Causal relation, in its scientific sense, can only be asserted of the different parts of one and the same conceptual series, whether it be physical or mental. But these considerations do not alter the fact that clinical observations of the type described above have a certain value of their own, and in the present imperfect state

of our knowledge a very great value. For one thing they form data for that science of psycho-physics which we have previously mentioned, for another they are of the nature of first approximations, and constitute a basis for subsequent and more exact work. But this more exact work must take the form of a causal series composed of mental states, and a second causal series composed of physical states.

The first essential in the study of insanity is, then, that the pathologist and the psychologist must proceed along distinct lines, each employing a coherent system of concepts, and each refraining from interpolating any concept belonging to the other. But there are certain methods which, as they depend upon the very nature of thought, may be properly made use of by both. Here belong the much-mooted questions of *classifications* and *disease entities*. Now the first point to be made is that, as the aim of science is to resume our past experience in order that we may predict future experience, classifications and disease entities cannot be the end of psychiatry, but only one of its means. Any classification, therefore, which enables us to handle our material in a convenient manner, and which enables us to predict the future to any extent, has to that extent validity and utility. It will be the more valid and the more useful the more it fulfils these conditions. On the principles expounded above it is obvious that diseases are simply convenient labels for grouping together more or less similar sequences of phenomena, and it is hardly necessary to point out to medical men that their borders are indefinite and to a certain extent arbitrary. Yet in the numerous discussions which have raged on the subject of terminology in psychiatry, many writers have evidently regarded diseases as ready-made articles which only require to be found, so that any particular classification must necessarily be right or wrong. Strictly speaking, in classifications of this kind the words right and wrong have no meaning. The whole question is one of practical utility. The Linnæan classification of plants was not *wrong*; it was simply less useful as a weapon of research than that now adopted. Similarly, the question at issue as regards Kraepelin's theories is not whether the diseases he describes *really* exist or not, but whether his classification enables one to proceed more efficiently in the departments of prognosis and therapeutics. If this is so, then his classification is valid and an advance on that

which it replaces. Kraepelin will then occupy a position in the history of psychiatry analogous to that of Kepler in astronomy. Great generalisations, such as Newton made, are more likely to proceed from the strictly psychological researches of Janet, or those of Jung and the Zürich school.

The function of a classification, then, is to serve as a weapon of research. It must be clearly recognised that classification exists for psychiatry, and that psychiatry does not exist for the purpose of forming classifications. In the melancholy and despairing chapter on classification which prefaces most modern text-books it is usually stated that the ideal, ultimate, and perfect classification is the anatomo-pathological. If the conception of the principles of science explained above is correct, it is obvious that some exception must be taken to this statement. The anatomo-pathological is, of course, *an* ideal classification—it is the perfectly legitimate ideal of the physiological method. But there is no more reason for ascribing perfection to the physiological ideal than to the psychological. The relative merits of each must be ultimately determined according to their practical utility, and it is very certain that, in the present state of knowledge, the data for such a determination are absolutely lacking.

If we apply our criterion of value, that is to say, the possibility of practical deductions, to the various classifications which have held their sway in psychiatry, it is true that we find imperfections everywhere. But it is no less true that we find evidence of a steady advance. If we open a text-book of fifty years ago under the heading "Mania," we are totally unable to construct a coherent mental picture of the cases described under it. If, on the other hand, we are told that a patient is suffering from katatonia we are enabled to form a pretty accurate idea of what we may expect to see. If katatonia be taken here in its wider sense as a symptom-complex and not as the narrower conception employed by Kraepelin, then the advance here indicated is to be regarded as an advance in the symptomatological classification. We have been provided with more definite labels. This type of improvement is the ideal of the symptomatological method, and certain authors maintain that it is the only type which can be entertained in the present state of knowledge. That it has a certain utility as an economiser of thought is obvious,

but its imperfections are denied by no one. Probably its greatest defect is that it tends to direct attention away from the ultimate aim of all science, the resuming of past and the predicting of future experience. It was as an endeavour to obviate this objection that Kraepelin conceived his disease entities and the longitudinal method of treatment. The essential advantage of this move was the importance assigned to prognosis and therapeutics. The essential disadvantage has been the more or less unconscious tendency to make the patient fit the disease. Much valuable mental energy has been wasted in arid discussions as to the precise disease entity to which a certain case was to be assigned. The most modern method of research combines the advantages of the symptomatological and disease-entity classifications, while it is to a great extent free from their imperfections. This is the method which Farrar ([14]) refers to as the "biological," and is in fact simply a recognition of the truth that psychiatry must proceed along the lines that have led to success in all other branches of science. It might also be called the evolutionary method, for it is an endeavour to trace the development of a mental state from that which preceded it, each constituent thread being conceived as related in a definite manner to its antecedents. By this means it is hoped that laws completely describing these relations will ultimately be formulated, and that the reproach of scrappiness and incoherence so frequently levelled at psychiatry will be removed. Thus a delusion will no longer be regarded as suddenly coming into existence without rhyme or reason, but its origin from the preceding mental state will be definitely traced out.

There is no reason to call the attention of the physiologist to the method just described; he is perfectly acquainted with it, and employs it continually in all his researches. Dr. Bruce's recent work, to which we have already referred in a similar connection, is an excellent example of the systematic observation of pathological sequences, and the endeavour to describe them by simple pathological laws. But the application of this method to the psychological conception of insanity is comparatively rarely attempted, more especially in this country. A good deal has been done on the continent and in America by Janet, Freud, Jung, Morton Prince, and others. Janet's great work on "Psychasthenia" ([15]) is a splendid example of what may

be accomplished by the psychological method, and its perusal may be confidently recommended to the anonymous gentleman in the *Times* who "cannot help regarding psychology as an *ignis fatuus*." If any progress is to be made, this is the type of work which must be substituted for that method of case-description so much in vogue, in which delusions, hallucinations, and bad tempers are aimlessly catalogued without reference to each other or to the patient.

The ultimate aim of science is the predicting and influencing of future experience. Translating this into the language of medicine we reach the all-important question of therapeutics. Here, again, the dogmatists and panacea-mongers are much in evidence. There is a school of thought which will have nothing to do with any therapeutics that is not physiological and which contemptuously dismisses the question of psycho-therapy as clap-trap and nonsense. This view is not only dogmatic, it is irrational, and it contradicts common-sense. The statement that magnesium sulphate is an efficient form of treatment, while the effect of a kind word is an unscientific delusion, is one which any nursery governess would have sufficient common-sense to laugh to scorn. Yet this statement, expressed in less bald language, is so widely held to be a self-evident truth that its origin and basis merit some investigation. It arises from those naïve conceptions which we have already criticised—the idea of the physical as something objective and *real*, of the mental as merely a flimsy, subjective, shadowy mirror image of the same reality. Hence, by the law of the conservation of energy, which is regarded by these thinkers in the light of a categorical imperative, if we would alter the reality we must do so by the employment of "real" *alias* physical causes. If insanity is an alteration of the brain then it can only be affected by physical agents, which alone have the power of acting upon the brain substance.

Now, as this doctrine contradicts common-sense, there is considerable *à priori* justification for regarding it with suspicion; and, as a matter of fact, we have already seen that it is based upon entirely erroneous premises.

The reality with which science deals is not a hypothetical world of "things-in-themselves," but the phenomenal reality of human experience. This reality is no more physical than it is mental, it simply *is*. The distinction between the physical

and the mental comes into being on the next plane; it is a difference in the method of conceptually regarding this phenomenal reality. When this distinction becomes more evolved and systematised, it becomes the distinction between physics and psychology. The physical and the psychological are two methods of conceptually describing one and the same content, the content of the human mind. Now both these methods make use of the concept of causality, and it is perfectly obvious that where we can speak of cause and effect we can also speak of therapeutics. For therapeutics is simply an endeavour to interpolate an element into a chain of causes with the object of producing a given effect. Physiological therapeutics is, then, to be regarded as the ultimate aim of the physiological method of conceiving insanity, psycho-therapeutics as the ultimate aim of the psychological method. We saw above that there was no reason for ascribing peculiar perfection to the physiological rather than to the psychological, so we must conclude that physiological therapeutics have no *à priori* claim over psycho-therapeutics. Their relative merits must be determined by their practical utility. As a science physiology has progressed very much further than psychology, with the result that physiological methods of treatment are at present more systematised and rationalised than psychological. Psycho-therapy is still in a nebulous stage, yet under the names of tact, intuition, sympathy, etc., it forms a considerable part of the stock-in-trade of every successful physician. Suggestion, which constitutes one of its methods, is now generally acknowledged to play an important *rôle* in the action of drugs. This is the factor which explains the popularity and occasional efficacy of quacks and patent medicines, and buried in irrelevant details it forms the modicum of truth contained in the doctrines of Christian Science. In the hands of men like Janet, Freud, and Jung, psycho-therapy has been rationalised to a certain extent and systematically employed with the most striking results. The classification of cases adopted in the best English asylums, the endeavour to segregate the curable from the incurable, and to provide the patients with a cheerful and stimulating environment, is another example of this same method. As a science it is still in its infancy, but that a vast field of potent therapeutics is now opening before

us in this direction cannot be doubted by any impartial observer.

(1) Höffding, *History of Philosophy*, vol. i, p. 375.—(2) Büchner, *Kraft und Stoff*.—(3) Moleschott, *Der Kreislauf des Lebens*.—(4) Ernst Mach, *Erkenntniss und Irrtum*, Leipzig, 1905, p. 4.—(5) Maxwell, *Scientific Papers*, Cambridge, 1890.—(6) Oswald, *Naturphilosophie*, Leipzig, 1902; *Die Uberwinding des wissenschaftlichen Materialismus*, 1905.—(7) Mach, *Die Mechanik in ihrer Entwicklung*, Leipzig, 1883; *Die Analyse der Empfindung*, Jena, 1902.—(8) Karl Pearson, *Grammar of Science*, 1892.—(9) *Ibid.*, 2nd edition, 1900, p. 281.—(10) The doctrines described in the text have in recent years become the basis of "Pragmatism," a system which has already obtained a firm hold upon the philosophical world. For an exposition of its principles the reader may be referred to Dewey, *Studies in Logical Theory*, Schiller, *Studies in Humanism*, Milhaud, *Le Rationnel*, 1898, William James, *Pragmatism*, 1907. Pragmatism, however, is really an ontological theory, and goes very much farther than the scientific idealism of Pearson, which is really a working hypothesis. The validity of the latter, therefore, is by no means dependent upon that of the former.—(11) Mach, "De la Physique et de la Psychologie," *L'Année Psychologique*, 1906.—(12) Fechner, *Elemente der Psycho-physik*, Leipzig, 1860.—(13) Höffding, *The Problems of Philosophy*, New York, 1905.—(14) C. B. Farrar, "Types of the Devolutional Psychoses," *Brit. Med. Journ.*, September 29th, 1906.—(15) Janet, *Les Obsessions et la Psychasthenie*, Paris, 1903.

The Mental Recreations of the Mental Nurse.(1) By ROBERT JONES, M.D., F.R.C.P.Lond.

OUR distinguished President, Sir William Collins, in his admirable oration delivered to us last year, expressed appreciative sympathy with the main objects of the Asylum Workers' Association. These are, firstly, to raise in the public esteem the calling we have chosen, and secondly, to succour those members of our body who have suffered in the service.

Our President's very eloquent and appealing address, clothed with the literary grace and expressed with the philosophic charm so peculiarly his own, was in matter and manner such that we all fervently hoped for an anniversary of the pleasure experienced last May. The claims made in his speech from the ethical side, *viz.*, upon character and conduct, rather than from the purely intellectual aspect of the nurse's duties, are applicable to all those who minister to the mentally afflicted, and our President's invocation that we, as asylum workers, should not let go our sympathy nor neglect the qualities of the heart out of homage to those of the head, will long be cherished as among his wisest aphorisms.

We regret that Sir William Collins—who was recently