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The Clinical Study of Mental Disorders. (1) The Presidential Address at the 85th Annual Meeting of the Royal Medico-Psychological Association, held in London, July 13-16, 1926, by Lt.-Colonel J. R. LORD, C.B.E., M.B., M.R.C.P.Edin., Co-Editor of the Journal of Mental Science; Hon. Secretary, National Council for Mental Hygiene.

Now that our Association, by a gracious act of our Sovereign, has been granted a Royal Charter—a signal recognition of its achievements and of the humane principles and aspirations of which it is an expression; a change, too, which is emblematic of the growth of its activities and influence—it is not inappropriate that I should address you on some aspects of the practice of psychiatry, especially in regard to possibilities and lines of progress in the future, and as to how the Association might better assist their materialization. The aspect I wish particularly to dwell upon is that which is the title of my address.

In these days all the sciences, whether mechanistic or biological, are tending more and more to leave their static or descriptive stage of the observation and classification of phenomena and to become dynamic and harnessed in the service of humanity. Thus, when some great discovery in science, or for that matter a noteworthy addition to any body of knowledge, becomes known, the question put on all sides is whether it can serve a useful purpose. It is the dynamic aspect which attracts attention. If the reply be in the negative then interest soon fades. It is a nine days' wonder and nothing more.

This attitude to knowledge is exerting a wide influence on education and the cultivation of learning in every direction, especially in regard to the sciences. In the schools dead languages are being neglected and the classical side replaced by the modern;

(1) Delivered in the Great Hall of the House of the British Medical Association London, W.C. 1, July 13, 1926.

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laboratories are superseding class-rooms; and demonstrations are superseding systematic lectures, and education in subjects most likely to be useful in everyday life is in the ascendant. In the domain of knowledge modern man's criterion is utility rather than culture, and in my view he is right, for real culture can only follow individual experience, and so become engraven in human character. We judge our fellow men by what they accomplish; indeed, in other respects we seldom know them.

Thus the old order passes and the new takes its place, and the new in its turn becomes old and has to go. Conceptual systems and hypotheses, when no longer of practical service, linger for a time as of historical interest; they are then forgotten and are heard of no more.

An upheaval, not the first of its kind, which has been a feature of the past half century and especially of recent years, has had its effect in the world of psychology and psychiatry.

Psychology, which has come to connote something more than the "science of mind" of the scholar, that began with theory and ended where it began—a subject of no practical utility, existing wearily in schools and universities and dead to the pulsating life outside of which it should have been the exponent—is now a living science concerning itself with both the internal and external phenomena of mental life, by a combined study of which only can real insight be gained into those psychic processes whose secrets have always been veiled in hypotheses ever changing with the progress of knowledge. The medical man, the lawyer, the minister of religion, the educationalist, the social worker, all have use for this dynamic psychology and its many practical applications.

Thus, like all other departments of knowledge, the many schools of psychology are being judged in accordance with the manner in which they respond to the tests now demanded. If they cannot help mankind to a better, a fuller and a happier life, if they do not assist us to understand human nature and to mould human character on a higher plane, then they must pass and give place to those of more promise.

THE ROYAL MEDICO-PSYCHOLOGICAL ASSOCIATION.

Now, our Association is the guardian and cultivator in these Isles of psychological medicine or psychiatry, the underlying principles and aspirations of which are well set out in those eloquent words written by Sir J. C. Bucknell, M.D., F.R.S., for the April number of our Journal for 1861 (vol. vii, No. 37, new series No. 1, p. 137), on its first appearance as *The Journal of Mental Science*.

In brief he describes our calling as mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. Included are mental physiology and mental pathology, with their vast range of inquiry into insanity, education, crime and all things which tend to preserve mental health or to produce mental disease, and also such metaphysical knowledge as is available for these purposes. These words of Sir J. C. Bucknell have been adopted as the preface to each of the volumes which have followed, and are as applicable to-day as when first written. The task (1) before the Association is thus annually brought to the notice of members.

The important question for us at the moment is as to how far the Association has carried out its obligations and whether it can be justly reproached with neglect of any of them, and, if so, what steps should be taken to insure that the reproach shall be deserved no longer.

The present-day conception of the practice of psychiatry covers, not one, but a number of activities, all of which are directed towards the amelioration, cure, and ultimately the prevention of mental defects and disorders, whatever be their cause, and in whatever form they present themselves. In pursuit of this high purpose psychiatry invites the co-operation of every department of knowledge, whether scientific or speculative, and every agency concerned in the promotion of social progress and, when necessary, the legislature, in its endeavour to cultivate and preserve the mental health of the community.

The problems, both medical and sociological, with which the Association has been confronted are admittedly of the utmost importance to the individual and to the race. They are of great antiquity, having faced mankind in every age, and the fact that their solution in many respects is as far off as ever is eloquent of the further fact that the difficulties they present are of no ordinary kind, but are deeply rooted in human nature. They are at once medical and anthropological, so that the term "medical anthropology" would not be an inapt synonym for modern psychiatry.

The Royal Medico-Psychological Association is concerned with the practice of psychiatry in its broadest sense. Psychiatry and mental hygiene are to be regarded as part of the larger problem of public health. This has been recognized in a very concrete fashion by the incorporation of the principal activities of the Board of Control in

⁽¹⁾ Reference to the minutes of the proceedings at the meeting in July, 1841, which inaugurated the Association, declares the objects of the Association to be the improvement in the management of the hospitals for the insane, the treatment of the insane, and the acquirement of a more extensive and more correct knowledge of insanity.

4 THE CLINICAL STUDY OF MENTAL DISORDERS.

the portfolio of the Minister of Health. As regards local administration, the Association has recommended the creation of a Statutory Committee of Mental Health, with wide jurisdiction. Although no doubt these new bodies, if they materialize, will for some time work side by side with the local public health committees, their functions in due course will tend to merge into one authority dealing with public hygiene. The narrower view that psychological medicine or psychiatry is merely a branch of medicine dealing with the medical care and treatment of individual cases of insanity was never that held by the Association. From early days the Association took the broader view to which I have referred, but I fear it has not always been mindful of the fact that this includes the narrower. It has thus happened, for reasons I shall presently describe, that in this country the practice of psychiatry and general medicine were never other than loosely connected, and there has been a regrettable tendency for them to remain apart. However, great stress has of late very rightly been laid on the necessity not only for strengthening those ties which still exist, but for creating new ones; for the closer linking up of psychiatry and general medicine is admittedly to the benefit of both. Those time-honoured principles and ideals which govern the practice of general medicine apply with equal force to all its various branches, and the skill and experience of these in return go to create that collective wisdom and broad outlook which enables the physician to view his patient as an individual, i.e., a physiological and psychological unit reacting to disease, and not merely as a person suffering from some systemic disorder or injury. Psychiatry in the past has not been sufficiently alive to its responsibilities in this respect, and general medicine has for long held aloof from psychiatry, not appreciating that by so doing it was neglecting the services of a helpful handmaiden in the treatment of those suffering from physical disease. This is a matter I will deal with more fully later. I need only say now that, happily, there are evidences in several directions of this much-desired rapprochement, the consummation of which, I trust, will for the future be regarded as one of the foremost aspirations of the

Now as to the functions of the Association. One of the principal of these is to gather and keep within its fold all British psychiatrists, irrespective of the particular field of psychological medicine in which they are most interested, for mutual guidance and education; to maintain a broad outlook on sectional developments, and to present a united front when co-operative action is needed.

I think some improvement in the administration of the Association's affairs is urgently called for in this direction. It must be

remembered that some of these branches did not exist, or were only in their infancy when the machinery of the Association was created, and the matter does not appear to be difficult of adjustment.

What is needed is that the groups of members should have ample opportunity of discussing together the subjects in which they have special interest, to which gatherings they could invite on convenient occasions the attendance of their fellow members generally, or sections of them.

As to those sections of the Association's work represented by the several Standing and Special Committees and their sub-committees—Education, Parliamentary, Post-Graduate, Library—and having regard also to the powers inherent in the Council, the Association has well-organized and effective machinery.

In those fields of activity, which include the education and training of mental nurses, post-graduate education in psychiatry, the legal aspect of insanity, and the administration of the Lunacy Acts and new legislation, the Association cannot be reproached either with lack of interest or with neglect. For this we are indebted to the assiduity and watchfulness of the various committees and their officers. The Association, indeed, has a long record of useful work in all these directions, and the great progress made, especially during the past thirty-five years, has either been on its initiative, or the outcome of the pressure brought to bear in the proper quarters by individual members or by the Association as a whole.

As regards the local authorities, the Association very wisely refrains from any direct interference with their work and responsibilities in matters touching the care and treatment of the insane. It leaves its influence to be felt through the agency of individual members, who are better acquainted with the needs and difficulties peculiar to the different localities. It supplies, however, by its general and divisional meetings, opportunities for the medical staffs of mental institutions to meet for mutual counsel, advice and education.

But the Association has no hesitation in addressing itself directly to central authorities and the Legislature on the broader issues affecting the care and treatment of the insane, on the lunacy law and its administration, etc., holding as it does a brief in these matters such as no other body in this country can claim to hold.

In none of these directions has the Association failed its founders. But can the same be said of it in regard to pathology, psychopathology and clinical psychiatry? And for the sound understanding of these there must be included normal psychology and the

physiology, morphology and histology of the nervous system. Many feel—and perhaps rightly—that the cultivation of these subjects and of research work is, or should be, the principal mission of the Association.

Have we allowed other matters—important matters it is true—to slip into the foreground of the Association's activities to the detriment of the subjects I have just mentioned? I fear it would be difficult, if not impossible, to refute such a charge. True it is that the pages of the Association's Journal teem with papers on these subjects, many of them having been read at meetings; but are they subjected to that close scrutiny and discussion by which alone they can be apprised at their real value? In most instances the reply is in the negative. At our meetings how often are apologies rendered by the President to members with papers to read that there is no time left for this purpose, or, if the papers are read there is no time for discussion?

I regard it as a grave matter and one which is likely to lead, sooner or later, to disruption in our ranks. A significant fact is that since the war the rising generation of psychiatrists, particularly those attached to mental hospitals, are not being attracted to the Association in the numbers they should be having regard to the larger area covered by psychiatry and the increase in the medical personnel of the mental institutions. It is noticeable, too, that the newly joined members are not as assiduous in their attendance at meetings as their older confreres. The fare offered them, except perhaps at the Annual Meeting, does not appear to suit their tastes. It should be remembered that as a rule it is not until medical officers reach the higher positions in mental institutions that administrative, legal or nursing matters begin to be of interest to them. Up to that time they are absorbed in clinical work, and not infrequently in pathological research. A wish has for long been expressed for the opportunity, within the fold of the Association, of meeting for the sole purpose of hearing clinical papers, examining actual cases of mental disorder, and discussing matters arising therefrom.

Another disturbing fact is the collapse of the Research Committee and the failure to resurrect it. As regards the encouraging of research work, at every annual gathering of the Association of late someone has raised this question, but, so far, the Association has not responded.

In two directions, then, it would appear to be urgent that the machinery of the Association should be overhauled and put into better working order. One I have already mentioned, *i.e.*, the attraction and retention within its fold of psychiatrists of every

description and school of thought, and the other is the furtherance of research and clinical study of mental disorders.

It is thus very desirable that there should be established machinery for meetings devoted entirely to clinical psychiatry and allied subjects. Such meetings would not prevent these subjects being dealt with at quarterly and divisional meetings when time permitted. But the study and discussion of clinical cases are of such great importance, especially to younger members, that they can no longer be left in the uncertain position they have occupied in the past.

The constitution of the Association, like that of most medical corporations, is built on a thoroughly democratic basis. Although the Council is the executive body, almost half of its members are elected by ballot of the several Divisions, and the principal officers are elected at the annual general meeting. General meetings occur annually and quarterly, and Divisional meetings biennially.

At the Divisional meetings the representatives of the Divisions on the Council are instructed as to the views of the Divisions on all those matters I have classified as educational, legal and sociological. The Council's decisions should thus largely reflect those of the Divisions. It would not be possible, therefore, to devote Divisional meetings entirely to clinical psychiatry. To prolong these meetings for more than one day, as has been done in Scotland, might be inconvenient, especially for junior members, who are principally concerned.

In regard to the holding of such gatherings I have the following suggestion to make. The ideal in my opinion is to hold clinical meetings under the auspices of the Association for much smaller areas than Divisions. They should be held regularly and frequently at centres in each area selected in rotation for this purpose. The machinery should be centralized in each Division and administered by a Divisional clinical committee. This is already in practice as regards London County Mental Hospitals, but not under the auspices of the Association—the Maudsley Hospital being the central meeting-place. The various mental hospitals concerned provide the papers and clinical cases in turn. Those I have been able to attend have been most instructive and enjoyable.

A short account of such meetings, with synopses of cases and discussions, could be published in the appropriate part of the Journal, pending the issue, perhaps, of a special clinical bulletin. I am sure many visiting committees would feel inclined to meet the expenses of such meetings for the reason that much benefit to the patients would accrue therefrom.

I would not limit the attendance to members of the Association,

but would admit all psychiatrists in the area, and also general practitioners who were interested and cared to attend. These clinical meetings might prove fruitful recruiting-grounds for the membership of the Association and for subscribers to our Journal. The adoption of some such scheme would not only remove the reproach to which I referred just now, and give satisfaction to members (especially junior), but would be an immense incentive to the progress of psychiatry in this country.

I propose to touch only briefly on the very important subject of research, as it is too large a matter to be dealt with satisfactorily on this occasion. Research work, however, has such close ties with clinical psychiatry—the main theme of my address -that I cannot entirely exclude it. In the By-laws of the Association (80) it is written that "The Research Committee shall have as its object the encouragement and guidance of original work in psychiatry"—a truly satisfactory reference, for it does not in any way limit the activities of this Committee so long as the work is original and the subject psychiatry. In my younger days we were prone to associate research work almost solely with the post-mortem room and the pathological laboratory, i.e., with pathology, anatomy, and histology, especially of the nervous system (section-cutting, staining, microscopic examination, etc.); but the recognition of the importance of endocrinology, bio-chemistry, bacteriology, hæmatology and serology, and also the advent into British psychiatry of dynamic psychology, biological in outlook and based on mental ontogeny and mental phylogeny and the beginnings of a psychopathology, have carried with them a field of psychiatric research of a much wider character. Nor can we exclude experimental, industrial and educational psychology, social psychology, anthropometry, eugenics and many other subjects, all of which help to illuminate the dark places in psychiatry.

Thus psychiatric research has burst the confines of the laboratory and flowed into the wards of the hospital, and from thence to the homes and environment of the patients.

As indicated, there are now many fields for psychiatric research. Some have been well cultivated and continue to yield abundantly, others are on the wane and hardly worth the tilling, and still others are new and promising ground ready to be broken, and a research committee will have some difficulty in deciding which of these fields are likely to be most fruitful and to repay the cost and labour of research scholars and other means of cultivation.

Psychiatry presents the widest opportunities for research, not only in regard to its own domain, but as an aspect of other co-related problems requiring elucidation. Our Association can not only establish and maintain research work in the directions which most concern it, but it can also advance good grounds for participating in research in other directions; for there are many difficult problems—medical, biological, sociological—to the solution of which the aid of the psychologist and psychiatrist, if not essential, would be at least helpful.

Moreover research work in other branches of medical science can be helpful to psychiatric research. A similar research in respect of some allied mental disorder could be undertaken at the same time as research into the causation of certain physical diseases. Much overlapping and duplication of work would thereby be avoided. So a Research Committee of the Association, to achieve its purpose, would need to initiate, co-operate and collaborate, and, to do this, machinery would be needed to keep in close touch with research work in many directions.

Two other functions could be undertaken by this committee, both of which are in my opinion vital to research and clinical work. I can only touch upon them briefly here, though they are deserving of a much longer reference. Later on I will emphasize the fact that much research work undertaken in the past has little or no applicability to-day because it was correlated with descriptions of clinical cases of a vague and shadowy kind, rendered so by the use of terms with either many meanings or with no definite meaning at all. The same sort of thing goes on gaily still and several pieces of fine research endeavour undertaken recently and published in the Journal are almost valueless, and before long will be totally so.

Furthermore, throughout psychological and psychiatric literature the same complaint is made, and it would be impossible to estimate the amount of confusion, misunderstanding and waste of time that ensues. This complaint has been best put by G. H. Lewes in the following words:

"I have often to remark on the peculiar misfortune of psychology, that all its principal terms are employed by different writers, and are understood by different readers, in widely different senses; they denote and connote meanings of various significance. All physicists mean the same thing when they speak of weight, mass, momentum, electricity, heat, etc. All chemists mean the same thing when they speak of affinity, decomposition, oxygen, carbonic acid, etc. All physiologists mean the same thing when they speak of muscle, nerve, nutrition, secretion, etc. But scarcely any two psychologists mean precisely the same thing when they speak of sensation, feeling, thought, volition, consciousness, etc., and the differences of denotation and connotation in their uses of such terms lead to endless misunderstanding. As Rousseau says, 'Les définitions pourraient être bonnes si l'on n'employait pas les mots pour les faire.' But since we must employ words as our signs, our utmost care should be given to clearly marking what it is the signs signify." (Animal Automatism, paragraph 14.)

Now it is not exactly the creation and publishing of an authoritative medico-psychological dictionary I am thinking of at the

moment, but of a glossary of terms in every-day use in psychiatry and psychology with a meaning—the one of greatest utility—attached, and in order to avoid confusion and misunderstanding, a request to teachers, students, writers, clinicians, etc., that if these terms be used, they are to be understood in the sense accorded to them by the official glossary and in no other. Amendments of the glossary would be announced in the Journal from time to time pending periodic revision.

Now a step in this direction has been taken in America by the Association corresponding to ours, and if, for instance, one finds the term "confusional insanity" referred to in American statistics, by looking up the Association's list of definitions of mental disorders one knows exactly the condition to which it refers. It seems ridiculous that some effort has not yet been made in this country to meet a complaint so well known and for so many years expressed.

It is to be regretted that the Association's table of mental disorders was issued without definitions of the terms used, and any statistics collected cannot be correlated with past statistics or carried on to any future statistics collected under a different classification. I have more than once pointed this out as strongly as I could in the Journal.

I am not an admirer of our table of mental disorders, as the terms used, with a few exceptions, are confusing and meaningless.

On the broader issue, psychiatrists, not being able to understand each other, take their own lines, and hence the endless, confusing and seemingly contradictory psychological and clinical conceptions. The student, unable to make head or tail of this *melée* of contradictions, makes the best shift he can, and his psychology as a rule is peculiar and individual to himself.

The other duty is the collection, registration and classification of clinical data for the purposes of psychiatry generally and research work in particular. I have never written up a good case in the records of a mental hospital without feeling that it was a pure waste of time. The sex, age, occupation, civil state, diagnosis and result would appear in statistical form, but otherwise the rest of my labour would be hidden, perhaps for centuries, between heavy brass-mounted boards, and that would be the end of it. Why should such labour in large measure be lost to the common good and advancement of psychiatry? The question how it can be made available is one deserving of the earnest consideration of the Association and the carrying out of its decision in the matter should be one of the duties of the Research Committee (perhaps with the additional title of "Clinical"). This would greatly encourage good clinical work in the mental hospitals and all research workers would

welcome such a means of acquiring authoritative data in regard to the subjects of particular interest to them. This duty cannot properly be undertaken by the Board of Control, which is an official body for carrying out statutory duties and not one representative of British psychology and psychiatry.

The great importance of psychiatrical research work lies in the fact that its results can, and for the most part do, become incorporated in clinical psychiatry. Experience shows that the research work of to-day often becomes the routine clinical work of to-morrow, and I remember the time when much of the routine work now done by the medical officers in the wards and in the laboratory was original work that found a place in the pages of the Journal.

The loftiest ideal of clinical psychiatry is that every individual case of mental disorder from its commencement should be treated as one for special research—which means that there should be no distinction between what is known as "routine practice" and "research." To permit of psychiatry being reorganized as on the same plane as other branches of medicine some such ideal is essential.

What, then, is needed to attain this, and how can it best be brought about? I have no doubt in my own mind as to the reply. We need to build up a sounder knowledge of the psychic processes underlying the disordered mind and of the correlated pathological physical changes. This calls for—

- (1) Research work in many of the directions I have already indicated.
- (2) Properly organized and routine team work in the investigation and treatment of individual cases.
- (3) The reconstruction of psychiatry as a science embracing the recognition, study and treatment of disordered mind occurring in every sphere of medical activity; social and legal psychiatry to be regarded as secondary but nevertheless important offshoots of the parent stem.

1. Psychiatric Research.

As regards the organization of research work. The considered views of the Association are embodied in the working of the Mental Treatment Bill of 1923, as amended by the committee which drew up the *précis* of evidence given before the Royal Commission on Lunacy and Mental Disorders. They are well known to you and I need not repeat them now. I need only say that the Association, as representative of British psychiatry, would through its Research Committee give all the assistance it could by advising as to the lines of research and by establishing or assisting towards

the establishment of research scholarships, and by generally co-operating with other bodies in the furtherance of research. A reorganization of the Journal would allow of the publication of the results of research being more freely undertaken.

At the quarterly meeting of the Association held at Gosforth on February 22, 1923, Prof. G. M. Robertson gave some details of a scheme for investigating the ætiology, prevention and treatment of insanity. Associated with the scheme were, among others, the names of Sir F. W. Mott, Drs. Bond, Goodall, Chalmers Watson, Marr, Good and Worth. These details were briefly "That there should be a large number of observations, on more or less identical and organized lines, conducted for a period of five years in various selected centres throughout the country into the causes of insanity and into the problems connected with the treatment of insanity." The promotors hoped "by these means to effect the discovery of much knowledge about insanity, whereby it might be possible to prevent insanity from arising, and to treat with success a much higher percentage of cases."

For several reasons the scheme has not yet been launched, and, though I do not view it with the same optimism as some of my confrères, nothing I have to advocate to-day would prevent such a scheme from coming into operation. I have no doubt it would achieve some good results, but five years' intensive work of this character would not place British psychiatry on the same footing as other branches of medicine. It is not a scheme to reorganize the practice of psychiatry, but essentially a research scheme, an experiment on a large scale, and not without the element of danger, inasmuch as it might postpone the adoption generally of improved methods of conducting clinical psychiatry until its results were known. None of us, I am sure, would desire this, and the Association has declared in no uncertain language that reforms in many directions in regard to the practice of psychiatry are urgently needed and long overdue. Furthermore, the operation of such a scheme would be greatly facilitated by the removal of legal obstacles and the better ordering of clinical psychiatry throughout the land.

2. Team Work and Clinical Psychiatry.

Now we have heard a good deal lately of what is known as the "individual treatment" of mental cases. We have also heard that in public mental hospitals it is sadly lacking, and that consequently few of those admitted recovered. Now what is the true meaning to be attached to this "individual treatment"? What is the idea underlying it? Is it thought that if there were one doctor to each recent case and an adequate nursing staff, recovery would be the rule and not the exception? Some idea of this kind no

doubt underlies the recommendation of the Board of Control (England and Wales):

"That the treatment of recent recoverable cases should be carried out by members of the medical staff conversant with modern methods, and experience during the last few years has shown that it is impossible for any one man, with due regard to individual treatment, to apply these methods to more than 50 recent cases. Therefore the number of the medical staff should be sufficient to ensure that none of them is required to undertake the treatment of a greater number of recent cases at any one time."

Perhaps I am not far wrong when I say that those who emphasize the necessity for this "individual treatment" attach a tremendous importance to the power of suggestion of the stronger over the weaker mind, and to a closer attention to the patients' material needs and comforts.

In my experience of public mental hospital practice individual treatment on these or similar lines is commonly practised and is only limited by the ratio of doctors and nurses to patients. It is no new idea, for it is generally accepted that the personality of the doctor is an important factor in the treatment of all diseases. If this were sufficient, then the cure of mental diseases would be a simple matter, i.e., increase the number of psychiatrists until the desired end be attained. But the problem which faces the psychiatrist is a difficult and complicated one, and despite all the individual treatment and however experienced the doctor may be in any or every known form of treatment, mental disorder can rarely be said in a strictly scientific sense to have been cured. It is admitted that a good proportion, considering all factors, recover or apparently recover, but it is seldom possible to say definitely that the form of treatment adopted has a constant and true relationship to the cure which follows. Of course the same occurs with regard to general medicine, but not to so great a degree as in psychiatric practice.

Dr. R. H. Cole, in his presidential address, Section of Psychiatry, Royal Society of Medicine, on November 10, 1925, in quoting the statistics of the Board of Control in regard to the recoveries and total discharges of direct admissions of certified patients and also the recovery-rate at an American psychopathic hospital, says: "Such figures would no doubt compare favourably with the same number of patients admitted to a general hospital." I have no grounds for disputing this statement, though, if I had my choice as to whether I would be afflicted with a physical or a mental complaint, from the point of view of the chances of recovery I should select a physical one, and I fancy he would too. He does not, however, mention the really important point, though it doubtless occurred to him, and that is the future of the 50-70% who do not recover. As regards general hospitals,

they either die or return to outside life and do not remain very largely a charge on the public.

The public not only expect mental patients to recover, but they object to the accumulation at their charge of the chronic insane—so much so that from time to time that only certain end, the lethal chamber, finds its advocates.

If statistics are to be relied upon it is difficult to explain why the recovery-rate has steadily declined with the increased facilities for medical treatment and the more humane care of the patients in public mental hospitals. Doubtless there are many factors which may account for this, but, as regards the better medical attention, the main object of my address is to show that, so far as it fails, it is due to faulty organization of medical work rather than to any defect in quantity on quality.

Individual treatment alone, however much concentrated, will never cure mental disorders, though of course it is undoubtedly a helpful factor, and, although there are many measures which seem to alleviate and even cure patients of particular symptoms, they are mainly used empirically, and rarely based upon a definite knowledge of the psycho-pathological or pathological processes at work, or even, in many cases, of the presence of somatic disease. Hence they are uncertain in their effects, and the ultimate outcome as often as not is disappointing. The "one man" treatment of mental disorders has been found wanting, and the sooner this is recognized the better. Neither will the mere multiplication of doctors have any better result. Something more is required, and that is what is now known as "team work."

Dr. J. Greig Soutar struck the right note when, speaking at the annual meeting held at Birmingham in 1925, he said that he was constantly calling in colleagues to make a more extensive examination of a mental case that he could not examine with sufficient thoroughness himself, and that pointed to the necessity for team work in regard to these cases.

Team work as applied to mental and nervous disorders implies that most if not all such cases are specially difficult problems, and unsolvable by any one branch of medicine or by any one medical man unaided, be he specialist or general practitioner. It also implies that the factors in mental disorders are many, and that each requires attention from someone specially capable of dealing with it. It means, not the "individual treatment" by one doctor, but the concentration on individual cases by several doctors, of whom one shall be foremost and responsible, and who has the final word in all matters of treatment. Thus "individual treatment" as I define it is not altogether that which is generally

understood by the term. It will help us to a better understanding of this subject if I digress for a moment and consider the history of the relationships which have sprung up between psychiatry and general medicine.

PSYCHIATRY AND GENERAL MEDICINE.

Now medical science as a whole is concerned with the restoration and preservation of health of the individual, and by health we mean the possession of a healthy mind and a healthy body. General medicine used to be divided into internal medicine, surgery and obstetrics, but the dividing line between any of these—never a clear one—can no longer be said to exist. Some of the special branches of medicine which have arisen during the past century or so occupy anomalous positions, since the means they employ are not limited to those of any one of the divisions mentioned.

Psychiatry, although recognized as a branch of medicine by the ancient Greeks, ceased to exist during the dark ages, and its renaissance was much delayed. Medical men up to a century and a quarter ago interested themselves but little in the study and treatment of the mentally afflicted, and the jailer, the magistrate and the priest reigned supreme. The birth of modern psychiatry dates from the work of Daquin [1791], Pinel [1792] and Esquirol in France; Fricke [1793], Langerman, Glawigs, Reil, Nasse and Jacobi in Germany; Guislain [1828] in Belgium; Evert in Holland; V. Chiarrugi [1759], Florence, Italy; Rush in America; Duncan [1774], Tuke [1792], Gardner Hill and Connelly in Great Britain.

How and why, we may ask, did psychiatry such as existed in this country in the early part of the nineteenth century leave its place as an integral part of internal medicine and establish itself as a separate specialty—a cleavage which became greater as the years passed, and in this country reached a position of almost entire isolation?

The answer as to "Why" is plain enough. It was a reaction against the apathy, prejudice, ignorance, callousness and even brutality displayed by the medical practitioner in those days in regard to the care and treatment of the mentally afflicted—an attitude in keeping with that of the public generally. The literature of the times affords many illustrations of this. A most striking one is found in Boerhaave's Aphorisms Concerning the Knowledge and Cure of Disease, Leyden, 1728. Boerhaave's treatise contains some very sound views on clinical medicine. He was fully acquainted with the common types of mental disorders and, apparently, also with general paralysis. He had noted that depression was usually

the forerunner of "madness." Regarding the treatment of madness, however, he says:

"1123. The greatest Remedy for it is to throw the Patient unwarily into the Sea, and to keep him under Water as long as he can possibly bear without being quite stifled.(1)

"1124. When all Remedies have been tried in vain, it has sometimes happen'd that varicous Tumours, Piles, Dysenteries, Dropsies, great Hæmorrhagies come of themselves, and Tertian or Quartan Agues have cured this Disease." (2)

Now as to "How" this separation from general medicine took place:

The efforts of those early pioneers I have referred to might have been defeated and the further development of psychiatry much delayed but for the impetus given by a few public-spirited laymen whose hearts had been touched by the plight of the insane. Priority in this matter should perhaps be given to John Howard (1726-90), who drew attention to the sad lot of the insane in the prisons in the report of his tour of inspection published in 1777.

It must not be understood that the movement was at first general in any country. As a matter of fact in several places in Germany such as Berlin, Frankfort, Lubeck and Brunswick, Daquin and Pinel's work in France was well on the way to accomplishment. (3) In England there was Bethlem and the Retreat, in Italy the asylum at Florence, and in America the mental hospital at Philadelphia, but the examples thus set spread very slowly throughout these countries. Germany, however, led with her journals (of which she had established five during the first fifty years, the first being in 1805), and her clinics and psychopathic hospitals. It is not difficult to

(1) This reminds one of a passage from William Cullen's First Lines of the Practice of Physic, 1784, quoted by J.B. Spence, British Medical Journal, January 20, 1900: "Cullen also recommends the use of the surprise bath, which, he says, consists 'in throwing the madman into the cold water by surprise, by retaining him in it for some length of time, and pouring water frequently upon the head, while the whole of the body except the head is immersed in water, and thus managing the whole process, so that, with the assistance of some fear, a refrigerant effect may be produced."

Cullen rejected humoral notions in the pathology of insanity and insisted upon careful pathological and anatomical investigations of the brain.

(2) The reference to tertian and quartan agues is interesting, having regard to the modern use of these diseases for the cure of general paralysis. Hippocrates was acquainted with the methods of curing mental disorders by inducing febrile diseases, and Galen actually records a case of melancholia cured by intermittent quartan fever.

(3) It is well to be clear as to Pinel's share in this noble work. Priority must be given to M. Daquin, a physician of Chambery, who published in 1791 a book On the Philosophy of Madness, in which it is proved that this Malady ought to be treated by Moral rather than by Physical Means. Daquin did in fact actually liberate many of the insane from their chains and found that extraordinary improvement followed. Pinel was first appointed to Bicétre in 1792, and also to Salpètrière in 1794, and his reforms commenced immediately. From the inscription under a painting by Robert Fleury it is gathered that Pinel's non-restraint treatment commenced in 1795 at the Bicétre.

understand why this was so, or why the gap between psychiatry and internal medicine was never so wide on the Continent as in this country.

Germany, whose example in this and many other respects has been followed by many of the Continental states of modern times, has a genius for research which is fostered by its Government and its universities. She recognizes the cultural and economic advantages to be gained by such research not only in science, but in industry and commerce. As regards psychiatry, this recognition led to the establishment in nearly all university centres of clinics and psychopathic hospitals. The movement, which dated from about the sixties and which owed much to the advocacy of Griesinger, had the effect of retaining psychiatry to a large extent in the main stream of medicine. The chief trouble abroad has not been the position of psychiatry in general medicine, but the relationship between psychiatry and neurology, about which I will speak later. In this country the story has been different.

Psychiatry has had to fight an uphill battle for the recognition of the humane principles upon which it is founded. Except for the exclusive devotion of a few physicians, general medicine stood apart and gave little or no help or encouragement. The material welfare of the insane, especially the insane poor, having been neglected hitherto, psychiatry from 1774 onwards was beset by legal enactments and restrictions, which resulted in the division of mental cases into those which were certifiable under the Lunacy Acts and those which were not. The unity of mental disorders for clinical purposes was thus rent in twain—the certifiable cases falling to the new science of psychiatry, which began to take shape in 1792, while the noncertifiable cases remaining with general medicine. necessary and desirable—and it was both—from the public welfare point of view, and notwithstanding the vast improvement in the material welfare of the certifiable insane which followed, this intervention of the law placed clinical psychiatry at a great disadvantage, which was not appreciated at the time by the little band of reformers, who, it is recorded, thought that only by proceeding on the lines of a strict specialty could progress be made. The ingenious arguments advanced in favour of this can be found in the first number of The Asylum Journal of Mental Science. The fact remains, however, that they were really driven to take up this position.

The great majority of those suffering from mental disturbances were now completely cut off from their fellow creatures and segregated in institutions commonly in out-of-the-way places; a guard was set about them, a definite section of the medical profession allotted to their care, and ultimately such treatment, except in LXXII.

terms of an Act of Parliament, was forbidden under heavy penalties. The uncertifiable insane, on the other hand, which included those in the early stages of mental disorder, were left without provision for their proper treatment except at the hands of a few general practitioners who made mental disorders a special study.

Thus British psychiatry grew up apart from that mutual collaboration and co-operation which has been so beneficial to other branches of medical science. Fortunately it had a surprising vitality and psychiatrists had the good sense to unite for the furtherance of their interests, and to secure to themselves a means of inter-communication in regard to all matters calculated to advance "the treatment, care and recovery of the insane." The foundation of the Association of Medical Officers of Asylums and Hospitals for the Insane at Gloucester, in July, 1841, which in 1865 became the Medico-Psychological Association of Great Britain and Ireland, and the Royal Medico-Psychological Association in 1925, its Royal Charter following on March 13, 1926, was a great event in the history of British psychiatry and has been the prime factor in winning for it the position it now occupies.

The work of the Association has been materially assisted by the publication of a Journal, the first issue appearing on November 15, 1853, as The Asylum Journal, the title being changed to The Asylum Journal of Mental Science in October, 1856, and The Journal of Mental Science in October, 1858.

[The Editors have been much assisted by the goodwill and loyalty of Messrs. Adlard & Son, the printers of the Journal from 1861-1867 and from 1898 to present time.]

British psychiatry has claimed the allegiance of many physicians of broad outlook, sympathy and great understanding. In addition to those pioneers I have mentioned, the names of the Tukes, Lockhart Robertson, Laycock, Sutherland, Hastings, Bucknell, Skae, Maudsley, Clouston, Forbes Winslow, Browne, Urquhart, Rayner, Mickle, Blandford, Savage, Yellowlees, Norman, Mercier, Newington, Sibbald, Needham, and of many others who have passed on and of others who still remain with us, will ever remind us of the fact that psychiatry has a noble purpose, of the battles fought and won in defence of its ideals, of the strength and vigour which still animates it: nor shall we ever forget the multitude of men and women nurses who have given to the care of the insane a lifelong devotion notwithstanding the recurring campaigns of criticism and calumny to which they have been subjected from time to time, based on the ignorance, suspicious and unsympathetic attitude of the public towards their calling.

"Life is short, and Art is long, occasion sudden, judgment difficult. Neither is it sufficient that the physician do his duty, unless the patient and his attendants do their duty, and that externals are likewise well ordered."

—Hippocrates.

The psychiatry of early days has broadened its outlook and widened its activities. Success has not yet crowned its efforts to raise the efficiency of clinical psychiatry to that of other branches of medicine—a want of success thought by many (and I am one of them) to be due to its still isolated position in the medical services of the country.

The scheme for intensive research for a period of five years at present being held up, the agitation for the establishment of psychiatric clinics in connection with schools of medicine and general hospitals and also of psychopathic hospitals, the addition of specialists and consultants to the staffs of mental hospitals, the employment of general hospital-trained women as nurses in mental institutions, are all evidences that this failure is being realized. Psychiatry is beginning to see the necessity for "back to the fold," and team work in clinical psychiatry provides a field where this reunion can best materialize. There also seems to be a sympathetic movement among the mental nurses in the same direction.

A study, then, of the history of the relationships of psychiatry to general medicine shows that it was the force of circumstances, largely unavoidable, which led in the first place to psychiatry being established as a strict specialty apart from the main body of medicine—circumstances which, in part, no longer hold good, and as for the rest, there are now reasonable hopes of their being swept away and of psychiatry returning to the maternal fold, not indeed as an errant child, but as an adult in the full vigour of life, seeking, not an apprenticeship, but a partnership, and bringing a capital—a rich offering of medico-psychological knowledge and experience, a something for which general medicine has begun to feel the need—and so affecting in a union full of advantages to both, and all to the benefit of sick and suffering humanity.

CLINICAL PSYCHIATRY: METHODS OF APPROACH.

Now it may be fairly stated that clinical psychiatry concerns itself with the ætiology, psychopathology and pathology, symptomatology, diagnosis, treatment and after-care of mental disorders. It should also be borne in mind that there is no sharp division between clinical psychiatry, clinical psychology and clinical neurology. I place clinical psychology between them to signify that it may be regarded as a link connecting psychiatry and neurology.

The practice of either psychiatry or neurology constantly involves

a knowledge of the other, though the difference between them almost equals that between medicine and surgery. Neurology, like surgery, is almost an exact science; although evolving on similar lines, it will be many years before the same can be said of psychiatry and medicine.

The integration of the organism as a working unit or individual is brought about by the functioning of the nervous system, which is a hierarchy of evolutional levels, namely the vegetative, the sensori-motor and the psychic. All three levels react upon each other harmoniously in the internal economy or self-regulation of the individual. This harmony is essential to the stability and maintenance of the individual in his relationship to environment as a whole. His adaptability and power of adjustment to environment depend upon the integrity of the three cardinal properties of the living organism, namely activity, selectivity and plasticity.

The biological problem of life and behaviour can be approached from many standpoints, and by as many methods. These methods of approach are chiefly three—the bio-chemical, the physiological and the psychological. Though separate, they are interdependent. The bio-chemical links biology with physics and the abiological sciences; the physiological links biology with bio-chemistry, and the psychological links biology with sociology. (1) The fundamental facts which emerge from these considerations are that bio-chemistry is concerned with the activities of living tissues, physiology with those of the organs, and psychology with those of the organism as a whole in relation to environment. In states of disease these are roughly represented by toxemias, systemic diseases and the psychoses.

Although the particular domain of clinical psychiatry embraces the morbid reactions at the psychic level, it is obvious that, as the interpreter of the individual's reactions as a whole, it must take into account morbid reactions at all levels. It must therefore include in its armamentarium more than psychology and clinical psychology. As an actual fact, in times past anything above a superficial knowledge of academic psychology on the part of the psychiatrist was not thought necessary and was rarely found, and his clinical psychology was based upon the symptomatology of mental disorders, with but little reference to any systematic psychology or psychological hypothesis.

Early in my address I said that psychiatry invites the co-operation of every department of knowledge, etc., in the carrying out of its objects. The question then arises, Which are the particular

⁽¹⁾ The term "sociology" was first introduced by Auguste Comte in his Positiv Philosophy, 1839.

bodies of knowledge, whether philosophic, scientific or associated with the arts and crafts, psychiatry needs for its clinical purposes?

In the first place it needs a psychology. Now the word "psychology" only came into use 332 years ago. It was preferable to "the phenomenology or philosophy of mind," because it avoided a plurality of words, and could, with a little modification, be used adjectively. In these days there is not one psychology, but many, and there are several which lay claim to be used exclusively in clinical psychiatry. None of these claims, however, are entertainable, for clinical psychiatry is more concerned with the cure of mental disorders than with the relative validity or otherwise of any psychological hypothesis or the methods of any particular psychology. It needs all of them-some more than others it is truein some relationship or other. Clinical psychiatry contemplates the jarring of the different schools of psychology with philosophica calm, and selects this and that psychological datum as it finds them best suited to its purpose: in fact, the more lively the contention the more reliable are the threads which remain intact.

General or descriptive psychology, with its faculties and capacities, is needed because at present it supplies the only adequate framework upon which to hang the symptomatology of the psychoses. No harm is done so long as the psychiatrist avoids reification in psychology and thinks of things mental in terms of activity, such as thinking, striving, feeling, remembering, forgetting, etc. Ideas are not stored or registered in the mind as such, but as psychic capacities for reviving or reproducing or "ekphorizing" (Bleuler) them. Neither must these activities be hypostatized into organs or faculties of mind, each with a machinery separate from the other, for dynamically the mind has no divisions: the same indivisible mind is operative in every mental process (Aristotle).

General or descriptive psychology is also necessary to experimental psychology, which psychiatry is now finding a valuable adjunct to clinical work.

Regarding experimental psychology, C. S. Myers says: "Far from being independent, experimental psychology has arisen as a refinement of general psychology. Familiarity with the latter is essential to success in the former."

Full advantage is not yet by any means taken by clinical psychiatry of the experimental methods of examination. Common observations are not always reliable, the trouble being the tendency to supplement them by what we imagine, and the difficulty in avoiding the very human tendency to speculation and guess-work.

Sometimes unaided observation arrives at the truth, but often not, and the result is frequently uncertain and fallacious. Experimental psychology holds out to clinical psychiatry methods of giving exact information regarding the mental condition and capacities of the patient, and we shall never arrive at accurate data regarding the disordered mind until we take the trouble to seek such data by scientific methods and cease to rely entirely on empiricism. The difficulty is that psychiatrists are not always trained psychologists, and psychologists as a rule know but little of psychiatry. This can only be overcome by team work.

It was Kraepelin who was mainly instrumental in bringing experimental psychology into closer touch with clinical psychiatry by the organization of his laboratory for such investigations at Heidelberg, in 1890, and this research work has added materially to our knowledge of the mental reaction, association, attention, rhythm, mental states of fatigue and sleep, and the effects of drugs in mental disorders.

So we may add experimental psychology to the list of psychologies needed by clinical psychiatry.

Although both descriptive and experimental psychology are necessary to clinical psychiatry, the latter has been given its greatest stimulus in recent years by the advent of dynamic conceptions in psychology. The building up of a psycho-pathology has now become a possibility; also a broader and more comprehensive psychiatry.

Hart dealt very thoroughly in his Goulstonian lectures, 1926, with the claims of psychology and psycho-pathology thus vitalized to be considered scientific notwithstanding the element of teleology which enters into the causality they postulate in regard to the phenomena of life and mind in health and disease (Lancet, March 29, April 3, 17, 1926). I had already touched on the matter in a review of McDougall's An Outline of Psychology (Journal of Mental Science, April, 1926) and had arrived at much the same conclusions, but he was able to bring to bear upon the question a discernment, precision and logical acumen far beyond me, and to my mind he showed conclusively that teleology was valid in causality in regard to the biological sciences.

Now Auguste Comte (1798-1857) in 1834 formulated the "Law of the Three States," according to which every branch of knowledge passed through three stages: (1) Supernatural; (2) metaphysical; (3) positive or scientific.

This third stage has since acquired greater definition. Science is a systematic arrangement of phenomena as recorded in the mind primarily through sense impressions. In other words, it

deals with the facts of human experiences(1) not objects, the method of so doing being all-important. Carl Pearson's three steps are now commonly recognized, namely, those of (1) observation of phenomena, (2) ordered classification of the facts observed, and (3) correlation of the facts thus grouped and the arrival at conceptions which are termed scientific laws.

Until latterly it could only be affirmed that psychology had taken the second of Pearson's steps, which entitled it to be regarded as a descriptive science consisting of a mass of empirical and experimental observations of divers values, classified and systematized according to many plans, always answering the question "How?" but never offering any adequate reply to the question "Why?"

The answer to the question "Why?" is all-important to psychology and psychiatry. Without it there can be no dynamic psychology and no psycho-pathology.

As regards psychology, the answer to this question has been attempted chiefly by postulating cosmological and ontological considerations commonly rejected from the sphere of science. Physiology, chemistry and physics offer causalities for life and behaviour which, though they may be valid as such, when followed to their logical conclusions always lead to the negation of mind or offer psychological speculations, some of which out-rival those of the descendants of the neo-Platonists and the Arabian philosophers.

It was the formulation of the Darwinian hypothesis of organic evolution in 1859 and the subsequent controversies that vitalized psychology, and led to its leaving its static stage as a scholastic and descriptive body of knowledge, and approaching nearer that of a true science equipped with well-authenticated laws and scientific methods, to become dynamic in practice as well as in spirit, and it may be said that dynamic conceptions saved descriptive psychology from the oblivion to which it seemed doomed.

Of the attempts which followed to answer the question "Why?" in regard to the problem of life and behaviour, two must be singled out as predominant, both based upon biological conceptions (2), one on mental phylogeny, the other on mental ontogeny. In the one case the vital impulse or urge was shackled to "purpose" as hormicly conceived, and identified with "instinct," and in the other case, to "wish" in the Freudian sense and identified with "libido" and "ego-trends"—these purposes being race "perpetuation" and

^{(1) &}quot;Experience expresses both physical and mental aspects." "Science is the systematization of experience under forms of ideal construction." "Physical facts are mental facts expressed in objective terms, and mental facts are physical facts expressed in subjective terms."—G. H. Lewis, Annual Automatism, para. 6.
(3) The term "biology" was first used in 1802 by Treviranus in Germany and

Lamarck in France, and was not adopted in this country until much later.

self "preservation" respectively, and the former primary to the latter.

Schiller (1759-1805) I believe called them "love" and "hunger." Freud teaches that they are at once friends and antagonists, always in conflict though necessary to each other, and, like all the elementary forces in nature, bipolar or ambivalent. He also holds that the common characteristic, indeed, the essence of all instincts is a "driving force."

Adler associates his driving force with the "superiority-aim" or "ego-urge" which calls to mind the "will to live" of Schopenhauer (1788–1860) and the "will to live" of Nietzsche.

By "libido" Jung means an elementary mental force akin to Bergson's "élan vital," something undifferentiated and not limited to sex. He does not agree, however, that purpose can enter into a scientific causality.

It is a question now whether the biological and dynamic trends which distinguish modern psychology from traditional psychology do not call for a new designation for the former. Indeed it is already referred to by some as "psycho-biology." Strictly speaking, psychology is only part of the larger science of biology, and human psychology a part of anthropology, but it is not an uncommon practice to qualify the name of a science by that of one of its branches.

The physiological phenomena of life can only be explained by physiology, its psychic phenomena by psychology, its chemical phenomena by chemistry, etc. Life has many sides, and the mental side is only one of them. The only advantage accruing to psychology is one outside, as it were, its own particular province—it alone can speak for the organism acting as a whole in response to environment. Some would have it that the day will come when life, soul, mind, behaviour, etc., will be reduced to a chemical equation. Of course this is nonsense, for chemistry is a secondary science based upon the deeper truths of physics and mathematics and only an expedient method of dealing with them. Beyond these truths men's minds cannot proceed far because the finite cannot conceive of the Infinite, and the belief in any ontology is an act of faith which may or may not be justified. It is much more likely that a more synthesized biological science will be evolved, allowing of the mind taking in at one time a much wider view of life than it can at present. It is such a science that psychiatry and sociology (including education, industrial efficiency and mental hygiene) need, though at the present moment they are beginning to find modern dynamic psychology above all sciences the most helpful.

The need of clinical psychiatry for this more synthesized biology

and to some extent the difficulty of its attainment is well expressed by Wiersma in the following words:

"If we knew all the anatomical and physiological changes accurately, and if in the same way all the relationships of the dependence of psychicai phenomena were known perfectly, it would be possible to write a book with physiological data on the one page, and on the other page the psychological data. The only difference between these two texts would be in externals, and not in essentials. They would resemble each other like two documents written in different languages, or two compositions, e.g., one written in Greek, the other in Latin letters. Only he who knows both languages or both alphabets will be able to master them."

How far and how soon this will materialize it is impossible to say, but the advent of the psycho-biological view-point has been of immense service to clinical psychiatry in that it brought with it dynamic conceptions which can be applied to the elucidation of the phenomena of mental disorders and diseases—indeed they are now well on the way to be fundamental to clinical psychiatry and psycho-pathology.

As previously stated they fall roughly into two groups, according as they are based mainly upon mental ontogeny or mental phylogeny. To the first group belong the school of Freud and his principal followers, to the latter that of McDougall, Rivers, Drever, Trotter and others; but there is no sharp dividing line between them.

To the former the period of infancy and child life is all-important: to the latter, instincts and character-formation. Both perhaps share in the importance of affection and emotion. The teaching of both is outstandingly conative. To the general biological school might be added in different relationships Schopenhauer, von Hartmann, Meyers, Boris Sidis and others, not forgetting that great philosopher, Bergson. The teaching of the Freudian school is also based upon the hypothesis of the unconscious mind as an active factor in determining mental processes.

There can be no doubt as to the importance to clinical psychiatry of the study of child life and development, *i.e.*, genetic psychology. What a heritage has this child of man! The experiences of every age have contributed to the helpless but powerful potentialities of the infant mind.

The child at birth may be likened to a glorified amœba hungering for food. Only the roots of mind exist *plus* reactions at the vegetative and sensori-motor levels and tropisms.

Look for a moment into its phylogeny.

With the monocellular animal it has slumbered in silent pools. As a fish it disported itself in deep waters. It discovered the land and burrowed for food and protection. It fought many battles for supremacy in the jungles and lived in the forests and learned nature and all her ways and moods, always profiting by and registering experience as organization of mind and body progressed.

Its phylogeny is, however, only one chapter of its ontogeny, though a fundamental one. The Freudian hypothesis of the auto-erotic narcissistic, homo-sexual, object-attachment stages of development and their fixation or regression has come to stay, and is pregnant with meaning in the psycho-pathology of many cases of neuroses, psycho-neuroses and psychoses.

The psycho-analytical conceptions of Freud and their modifications by Adler, Jung and others constitute a general ontogenic school of dynamic psychology whose achievements have been a distinct gain to psychiatry, especially in regard to psycho-pathology. Above all it has given us a better insight into mental mechanisms, both in health and disease. The importance of the unconscious activities of the mind, of the conceptions of organ inferiority and psychic compensation, introvert and extrovert types, "wishfulfilments," projection, fantasy, regression, sublimation, conversion, etc., and of conflict and of the effects of repression and the damming back of the primitive instincts, especially the sexual, in the modification of conscious state and behaviour, especially in relation to the occurrence of psychopathic states, have obtained a wide recognition.

The advent and growth of these new psychological views have given psychiatry a new vigour, have quickened the interest of the profession and the community generally in psychological matters, and incidentally in the practice of psychiatry, and infused new hopes and aspirations for the future. The mental mechanisms set up by this school are much more firmly established than the sex theories, and do not necessarily involve the acceptance of the latter.

The progress of the ontogenic school has also acted as a stimulus to the phylogenic school, and a common biological outlook has been recognized by MacDougall, who says:

"The mechanical psychology, the intellectualistic psychology and the hedonistic psychology, these three psychologies, which were the prevailing fashions of the nineteenth century, were of little or no use to the student of mental disease. In consequence mental medicine, or psychiatry, was at a standstill. The genius of Freud, disregarding all these traditional psychologies, introduced a psychology of which the keynote is purposive striving, a hormic psychology which operates, not with mechanical reflexes, and not with such vague inert abstractions as sensations and ideas, but with active purposive tendencies, impulses, desires, longings and strivings; and psychiatry at once began to make, and continues to make, great strides." (Psyche, July, 1924.)

Before this he wrote:

"The reality, the richness, and the importance of these subconscious operations of the mind have been brought home to many of us with a new

force by our experience of the functional disorders of warfare; for no one working among these cases can have failed to come across many instances in which the symptoms, both bodily and mental—amnesias, war-dreams, phobias, anxiety states, paralysis, contractures, epileptiform seizures, headaches, tics—have been undeniably traceable to emotional conflicts and repressed tendencies and ideas, which have operated wholly or partly beneath or without the clear consciousness of the patient." (Journal of Mental Science, vol. lxv, 1919, p. 148.)

As the chief exponent of the dynamic school of psychology, which holds that the instincts are the driving forces of life and mind, and lays stress on "purpose" in this connection, we will let McDougall speak for himself:

"The instincts are the prime movers of all human activity; by the conative or impulsive force of some instinct, every train of thought, however cold and passionless it may seem, is borne along towards its end, and every bodily activity is initiated and sustained. The instinctive impulses determine the ends of all activities and supply the driving power by which all mental activities are sustained; and all the complex intellectual apparatus of the most highly developed mind is but the instrument by which these impulses seek their satisfactions, while pleasure and pain do but serve to guide them in their choice of the means. Take away these instinctive dispositions, with their powerful impulses, and the organism would become incapable of activity of any kind; it would lie inert and motionless, like a wonderful clockwork whose mainspring had been removed, or a steamengine whose fires had been drawn. These impulses are the mental forces that maintain and shape all the life of individuals and societies, and in them we are confronted with the central mystery of life and mind and will." (Social Psychology.)

C. v. Monakow, another hormist, regards the emotions as the dynamic factors:

"The emotions (the primitive instincts of the living protoplasm) are therefore the primary factors; they really create and perfect the nerve substances, construct the brain, and the brain inclusive of the emotional sphere which, by reactive influence, is constantly creating new emotions, becomes the instrument for all our emotions, sensations and thought." (The Emotions, Morality and the Brain.)

Trotter sees in the gregarious or herd instincts the mainspring of most human activities. Möbius (1853-1907) defines an instinct as the power which drives.

Rivers laid the bases of a most illuminating hypothesis of human behaviour by a comparative study of instincts in the lower animals. He suggested that the instinctive activities might be viewed as protopathic and epicritic, as in the case of the sensations, the former being suppressed in favour of the activity of the latter. The protopathic group would thus embrace the primitive and individualistic instincts, and the epicritic those of social adaptation.

Stekel teaches that protozoa have instincts which are immanent in its physical structure. "Instinct is the sign of life; indeed it is life." The brain is the intellectual elaboration of instinct. The primitive man must be understood before we can know the civilized man. Stekel is also a hedonist, in that he says every instinct is a

pleasure urge. Clouston taught that every natural act should be a pleasure, even that of defæcation.

The applicability of Prof. McDougall's hormic and purposive psychology to clinical psychiatry is patent to all readers of those fine chapters in his An Outline of Psychology dealing with "instinct," "emotion," "character" and the "behaviour of the natural man."

Thus it has come about that the clinical psychiatrist is tending less and less to view his cases from the descriptive and static point of view of reason, judgment, belief, ideas, sensation, hallucination, association, incoherence, retardation, amnesia, etc., in favour of the more dynamic conceptions of instincts, impulses, motives, wishes, desires, moods, emotions, and above all, character, which embraces natural intelligence, disposition, temperament, sentiment. He is not satisfied with descriptions, but wants to know "why" and searches the patient's mind from its infancy for this purpose. He goes further and invades that common psychic underworld the phylogenic psychic past-in which are to be found those stores or springs of energy which lie at the roots of all human behaviour. Speaking figuratively, he is no longer contented with naked-eye appearances, which do not help him very much, but seeks with the aid of the microscope those facts which are essential to the proper understanding of his cases.

Bergson asks, "What is our character, if not the condensation of the history we have lived from our birth, nay, even before our birth, since we bring with us prenatal dispositions? . . . Doubtless we think with only a small part of our past, but it is with our entire past, including the original bent of our soul that we desire, will, and act."

The same idea is expressed in those beautiful words of John Townsend Trowbridge (1827-):

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"Our days, our deeds, all we achieve or are,
Lay folded in our infancy; the things
Of good or ill we chose while yet unborn."
(Sonnet, "Nativity.")
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As I have already stated, psychiatry is not concerned primarily with the validity of the many hypotheses of mind and of being, and is entitled to make use of any hypotheses, however speculative, in furtherance of its main aim, which is the cure of mental disorders and diseases.

I may, then, be excused if I confess to a gross speculation, for I have ever found it useful to think of man as having two psyches, or *per contra*, two sides to his one psyche. I could never get on with his traditional division into body, soul and spirit, for I did not

know where to place his mind. Having had a metaphysical upbringing, I early concluded that mind could not be identified as body. Life and mind were inseparable. Life was objective, mind subjective; mind being also objective as observed in another. The conception of primitive man recently in the "Eon" sense descended from the trees, where he had been acquiring the erect posture, strong and healthy in body, astute and wise, a pupil of Nature, knowing no wrong, having deep but simple passions, slow to anger but terrible when enraged, thinking all things were made for him, taking a pride in conquest, fearing nothing but hunger, seeking always the happiness he imagined should be his lot, forms the picture in my mind of the natural, the fundamental psyche of man.

True, this figment of imagination is indifferent to the welfare of his neighbours, knows no pity or mercy, and is utterly selfish except perhaps in regard to family ties. He is certainly not a lovable creature, but an awkward customer to meet at the best of times, and probably the terror of the country-side, being curious, vain, provocative and aggressive. His life is a drama of adventure, bread-winning and love-making. Still, his instinctive activities have a biological rather than a psychological value, and the end or aim is nutrition—not eating; reproduction—not coitus; survival—not fighting; contentment—not pleasure, etc.

Call him beast if you like; yet he is a noble beast, in tune with Nature, untainted with meanness, deceit or cowardice, and much more likely to gain admission to those happy hunting-grounds he thus early is probably envisaging as an eternity than his many soiled and degraded descendants of to-day.

Our natural man is not without the gregarious instinct, but in his innermost heart he loathes and detests the primitive and simple community laws when they interfere with his freedom of action; but, on the other hand, keenly relishes applying them to others of his community, the punishment of whose backslidings adds to his self-appreciation—an attitude to the social machine he has never since relinquished, and which has become more and more emphasized in succeeding generations.

These early herd instincts would appear to be the precursors of his other psyche, one of a totally different type and the beginning of that long-drawn-out attempt at the subjugation of the natural psyche, a struggle which has been the central feature of the history of mankind ever since, and which shows man to be at once the hope and despair of all creation. Could our natural man have foreseen the time when his soul energies would be crushed and mangled beneath a load of conventionalities, his liberty and freedom subjected to endless laws and restrictions, and when he would even

not be able to expectorate in public places without surrendering two buffalo hides, or, as we would now put it, 40s., and costs to boot, he might have hesitated before commencing that dreadful journey it has been his lot to travel, and there and then have made a firm stand that ten commandments were sufficient, and that whenever his law-givers thought it desirable to add another, one should be repealed to make room for it.

Alas, it was not to be, and he went blindly to his fate. No doubt the discovery that he could make fire at will was the first step onwards—an event probably unparalleled in the annals of human development and social progress. From this time he took his fate into his own hands, and the sensuous allurements (good and evil) of this other psyche became the dominating factor of his further evolution, instead of the infinitely wiser but slower process of natural selection.

As Freud has put it: "Somewhere in the heart of his 'ego' he has set up an organ of observation which watches over his own impulses and actions, to see whether they accord with his demands." (Journal of Mental Science, xvii, 1921, p. 37.)

This new psyche brought with it a moral conscience—a sense of right and wrong, good and evil-cold reason, something it called justice, doubts, fears (especially of death), and life became more and more complex and hurried. The herd demanded the complete surrender of the individual. Some things became taboo, and gods arose to be worshipped and propitiated. Work became toil. The psychophysical energy streamed after knowledge, which became a community possession too vast for any one individual. A ceaseless conflict raged between these two souls, which I have known since Rivers's teaching as the protopathic and epicritic. They represent self-interest and altruism, individualism and sociality, intelligence and intellect, instinct and reason, freedom and subjection, and in these and in many other respects they are the antithesis of each other, though both are dynamically bipolar, and the protopathic is ever alert to resume full control. The aim of one is strictly biological; of the other psychological and sociological, and the free hunter of the plains and forests has been brought to submit to the severest requirements of social life by the promise of an eternal bliss in the hereafter.

It fell to the lot of medicine and psychiatry to repair man's physical and mental failures, and of religion to heal his bruised soul.

That man was not ready for the complete and permanent assumption of the erect posture is shown by his tendency to abdominal and circulatory troubles, curvatures of the spine, malformations of hips, flat-foot, etc.

It is not difficult to see the disasters that have followed in the train of the epicritic psyche. In many relationships its efforts to attain supremacy have not only been vain, but destructive, and, besides individual shipwrecks, from time to time disillusioned humanity seeks compensation in outbreaks of civil commotion and racial animosities and strife, not infrequently characterized by rapine and murder and all the evil the epicritic mind can suggest—in all a poor substitute for the freedom and liberty of the protopathic psyche.

That Nature has no use for man in a hurry is as true of the race as it is of the individual, and the epicritic psyche has still much to learn from the wisdom of the protopathic.

Yet it is upon the healthy activity of this epicritic psyche that all hope of individual and social progress is now centred, and mankind has yet far to go before the sovereignty of an enlightened, chastened and uplifted protopathic psyche can be achieved; and when, if ever, this goal is reached, it can then, and then only, be said that man, freed from conflict, has complete mastery of himself and his destiny.

I have spoken of these views as speculative, but are they really as speculative as they seem to be? We are told that "There is no new thing under the sun" (Ecclesiastes i, 9), and that "History repeats itself" (Plutarch, p. 912), and something akin to the notion of the duality of man's mind can be traced back to the time of Aristotle, who said that man was a social animal and that in him the biological aim had been submerged in the social.

The epicritic psyche can be likened to the "nous" of Plotinus, "conscience" of Butler, the "censor" of Freud.

The herd instinct is used in this sense by Trotter. Then there is the "two-factor theory" of de Sanctis, and the "Groupmind" of the sociological psychologist.

The two-minded theory of Rivers I have already alluded to. Auden says:

"The social demands of the group-mind, to use MacDougall's phrase, are in the main an epicritic form of mental activity, and are, therefore, subsequent to the primitive trends towards the satisfaction of the individual ends and desires. This is true both phylogeneticly and ontogeneticly, and there is, in fact, in every one of us an ever-present conflict between this primitive or protopathic trend towards individualism and that towards social or altruistic behaviour." (Journ. of Ment. Sci., lxxii, January, 1926, p. 12.)

It may be asked what has all this to do with clinical psychiatry, and in what way have you found this notion of duality of mind useful? My reply also takes the form of a question. Which psyche is it, the protopathic or epicritic, which is of most concern to the

clinical psychiatrist? The answer to this question is to be found in all I have said about psycho-biology, about biological and dynamic conceptions in psychology.

The notion that what is called the highest psychic realm has to do solely with all that is gentle and refined, of love, family life, morality, ethics, religion, etc., in contradistinction to the lower psychic realms, which alone pander to the lusts of the flesh, sin, wickedness, and all that is brutal and unwholesome, is not in accordance with the facts of biology and anthropology, and is of no assistance to clinical psychiatry. The epicritic psyche is above all educative, analytical, discriminative and inhibitory. It dissects the foundations of life and behaviour, and puts a value on this and that in accordance with an artificial and varying standard. Its ideals, like the impulses of the protopathic psyche, are not single, but two-fold or ambivalent-right and wrong, gentle and vulgar, refined and coarse, kind and cruel, etc. It has no emotional contents of its own. It lures the protopathic in this way and that way, exhorting, inhibiting, permitting, etc. It is the censor and, above all, it presides over the relationship of one individual to another and of the individual to the community.

I have always found the conception of reason, intellect, etc., being susceptible per se to disease and disorder, difficult. I will not presume to say that such does not occur, but it seems to me that reason and intellect must always be reason and intellect, and that there cannot be such a thing as unreasonable reason or unsound intellect. These are a contradiction in terms, so I have but little practical use for the conception of intellectual disease or disorder—certainly not as a starting-point to a mental disorder.

The idea now prevailing of the so-called highest psychic realm becoming decayed, or suspending its functions and setting free activities in lower psychic realms, thus removing, as it were, the brake on the emotional mechanism, on the animal passions, etc., is open to objections in the majority of the psychoses and psychoneuroses, and can only be urged in acute toxemia and primary mental degenerations.

It is in disorder of the machinery of the protopathic psyche; in a disturbance of that normal balance of the protopathic and the epicritical which constitutes character, in that rebellion of the protopathic psyche against the exacting demands of the epicritic, that the answer to "Why?" of mental disorders and diseases is to be sought and where their psycho-pathology is to be found.

"The insane man is he in whom the mortal and the immortal, the un reasonable and reasonable soul do not appear in normal proportion and strength." (Paracelsus [1493-1541].)

Most mental disturbance, not primarily organic and degenerative, appears to me to be a defence mechanism—symbolic of a need for rest, for a return to communion with Mother Nature, for the relief of the tension engendered by hurry and scurry of modern civilization, for an escape from some impossible situation that has arisen in the individual and his social life. The symptomatologies of the psychoses are symbolic of the dreads and fears, the hopes and longings, the haunting memories, and also the submerged shocks and complexes and forgotten experiences of life. It is conceivable also that morbid over-activity of the protopathic psyche may tire out or overwhelm the epicritic control mechanism and lead to its temporary paralysis or permanent decay. The clinical psychiatrist has been too long obsessed with imperception, illusion, hallucination, delusion, confusion, amnesia, etc., and largely blind to the basic significance of morbid impulses, strivings, motives, desires, cravings, feelings, affections, anxieties, emotions and passions, of which they are merely reflections. Let the psychiatrist turn over the pages of the life-history of the protopathic and see what he can read there if he would hope to restore that balance of protopathic and epicritic mental function we call sanity. Mental disorder is not a mere episode, an interlude, something here to-day and gone to-morrow, but essentially a change of mental structure for the most part commencing at the very roots of mind, and commonly the exteriorization or letting loose of a malady which has been generating for long years.

Hugh Elliot, in Human Character, says:

"The first point to appreciate about human character therefore is that motives spring from instincts, not from reason; that the human mind consists of feelings to which intellect is merely a superficial veneer."

"The world of human life is governed, not by reason, but by passion, emotion and sentiment."

And there is a good deal of truth in this.

I will conclude now what I have to say of the philosophical side of psychiatry.

Man, in spite of the revelations of science, still tends to imagine himself to be the pivot of all things mundane, and some men would even now claim that Nature has had no other aim from the beginning of things than his ultimate perfection. Others take a diametrically opposite view and regard him merely as an epiphenomenon—an accident of the cosmic forces—and his survival or extinction a matter of no earthly importance. I never feel certain which view is the right one. C. von Monakow says:

"Full security of position in life, complete peace and perfect contentment are only possible for brief moments—moments not rarely attained by great effort. The prospects for the future which we strive to endow with the same LXXII.

emotions of satisfaction are in reality only phantoms. Only by repeatedly surmounting the external and internal obstacles through the proper cultivation of the emotional life and the character, supported by the constantly active urge towards perfection, can an adult cultured person attain that which seems to be naturally granted to animals and children namely, harmless pleasure in life."

Maudsley, in his old age, wrote:

"That ethical aspiration has been an important and abiding factor in human development through the ages is an incontestable truth. Human ascent from its lowest stage of being to its present height witnesses positively to its operation, irregular and uncertain it may be, but on the whole undeniable and decided."

Bergson, who views all life as a "becoming," says:

"In every human form we see the effort of a soul which is shaping matter; a soul which is infinitely supple and perpetually in motion, subject to no law of gravitation, for it is not earth that attracts it."

And Aristotle:

"It is by wisdom that he is enabled to cope successfully with unaccustomed circumstances, to make plans, to take long views; in short so to regulate, adjust and shape his conduct in accordance with present and possible future environment as to merit, if he does not actually achieve, success in life." (Ethics, Book VI.)

These quotations remind one of that verse in Longfellow's "Keramos" (1807-1882):

"Thine was the prophet's vision, thine The exaltation, the divine Insanity of noble minds, That never falters nor abates, But labors and endures and waits, Till all that it foresees it finds, Or what it cannot find creates."

I fear I have not that wisdom which can take long views, but I feel that von Monakow is right when he says "The goal which we strive unceasingly to reach as the reward of our endeavours is illusory. It is not the final arrival at this goal which brings us true happiness, but the toil and striving towards that goal."

Though I have lost many illusions about the epicritic mind, I sometimes think that there is truth in that old saying of Von Logau (1604-55):

"Though the mills of God grind slowly, yet they grind exceeding small:

Though with patience He stands waiting, with exactness grinds He all."

—Retribution.

Certainly it seems to have been ordained from the beginning of time that only by strife and contention can man advance to stages of greater knowledge, efficiency and strength and purity of character.

The natural man in us cannot be spiritualized and strengthened by a milk-and-honey existence any more than a sword can be sharpened on a feather bed. It is fortunate man can only know that which his mind creates, and also that things in themselves are a closed book to him. If it were possible for man to reach out into reality, knowing all things as they are and not as they seem to be, then would he sit and weep like the Israelites of old by the banks of the Jordan for the land of hope and promise he has left behind, with no future before him, an end to his strivings, no time but a changeless eternity, an ever-abiding present, and only the past to contemplate.

Karl Pearson says:

"The goal of science is clear—it is nothing short of the complete interpretation of the universe. But the goal is an ideal one—it marks the direction in which we move and strive, but never a stage we shall actually reach. The universe grows ever larger as we learn to understand more of our own corner of it." (The Grammar of Science, 3rd ed., Part I, pp. 12-14.)

We are to be thankful that there always will be an unattainable; always something to strive for, to hope for, to wish for, and that something higher and yet higher still; a constant conquering and achieving, and the beyond ever a mystery and past understanding. It is the privilege of medicine to see that men are not handicapped by unhealthiness and disease in this forward struggle, and psychiatry as an integral part of medicine shares in this noble purpose.

Before dealing with the physiological and pathological approach to the mind in health and disease I must make some mention of what has been named "mechanistic psychology," a prominent exponent of which is Prof. J. B. Watson.

Now a psychology which declines to take into account feeling, desiring, striving, recollecting, imagining, dreaming—in fact all experiences—does not deserve the cognomen of psychology. It is not the "behaviourism" contemplated by John Stewart Mill and Dr. Charles Mercier. They thought of a science separate from psychology—one of behaviour, conduct and character. The former suggested for it the name "ethology" and the latter "praxiology."

I see no place for a separate science of "behaviour." It is only one of the many sides of psychology—long neglected, it is true, howbeit an essential one.

Nevertheless, and notwithstanding the many criticisms the conceptions underlying "Watsonian behaviourism" and its companion "objective psycho-pathology" lay themselves open to, their teachings should not be neglected by clinical psychiatrists. They emphasize the importance of the close observation of conduct in mental disorders, not merely with a view to making complete records of cases, but of interpreting the conduct observed, and thus gaining an insight into the fundamental reactions which are at fault.

We have now briefly reviewed the more important of the psychological approaches to the problems which concern clinical psychiatry, and it will be seen that they are all of service in some relation or other, and that none of them should be neglected if solutions are to be found. We have dealt with them chiefly from the static, descriptive and dynamic points of view, and also touched upon—as Sir J. C. Bucknill puts it—"such metaphysical knowledge as may be available for our purposes."

"The best physician is also a philosopher."

Galen.

It is difficult for the psychiatrist to ignore cosmology and ontology as often advised in text-books, and besides, a little acquaintance with metaphysics is good for us all, and counteracts that tendency, so common nowadays, to positiveness, self-sufficiency and blatancy. We walk a little more humbly and become more thoughtful and broader in mind even after a brief attempt to peep behind the curtain which veils the mystery of mind and matter, of being, of consciousness, and of the relationship of man to the cosmos.

Huxley said, "What we call the operations of the mind are functions of the brain, and the materials of consciousness are products of cerebral activity," which was also put so misleadingly by Cabanis and Vogt [1847-1885]. This view, however, is not inconsistent with constructive idealism. The mind thus bred out of matter is only cognizant of experiences upon which it constructs, or substitutes a hypothetical reality. It may be, then, that matter through the mind never knows itself, or on the other hand (Huxley), the brain (mind) is the machinery by which the material universe becomes conscious of itself. It is remarkable how educated men and women generally, though never backward at expressing admiration, even worship, for the works of Nature, make an exception in the case of the brain. This despised, yet wonderful machine has been clamouring for recognition ever since the dawn of history and has yet to come into its own. For the most part it is only grudgingly given a position secondary to a hypothetical and immaterial entity called the mind, and not that if it can be argued otherwise. Yet its existence is the most stupendous fact of history, for without it there would be no history, no world, no universe, no Nature for mankind.

There must now be added the physiological and the bio-chemical approaches.

Now in the provinces of pathology and psycho-pathology there have grown up two principal schools, namely the physiogenic (with which may be conveniently included the bio-chemical) and the psychogenic, a school identified with those dynamic conceptions in psychology already described. It will help us in apprising these

schools if we pause a moment to consider which of the many conceptions of mind is likely to be of most service to the clinical psychiatrist.

That eternal question, "What is mind?" It has been asked since the dawn of human intellect. It has been answered a full score of times from then to now. It is still being answered, yet nobody knows. (1)

When Heraclitus [540-475 B.C.] said "The boundaries of the soul you cannot find, though you pace off all its streets, so deep a foundation has it . . . ," he was not far from the truth.

It is a fact inscrutable, but, remembering that psychiatry is more concerned with the utility rather than the validity of psychological hypotheses, two conceptions of mind are available for clinical purposes. These are (I) the strictly psychological or subjective, which is practically limited to conscious mental processes—they do not always occur consciously—having its physiological correlate in the cerebral cortex and to a less extent in the basal ganglia of the brain, and (2) the "total reaction" conception, which might be termed the biological—its principal modern exponent being Dr. William A. White. The latter is a much wider conception and includes the former, and is bound up with the activities of the whole nervous system together with certain endocrine organs as integrator of the functions of the organism as a whole.

Now there seems to be no doubt that this biological or "total reaction" conception is the one likely to be of most service to the clinical psychiatrist. The difficulty is that it often leads to some confusion of thought and language. One cannot, without some qualification, speak of the peripheral sense-organs taking in the streams of energy constantly playing upon them, such being transformed in the body and delivered as life and behaviour, and at the same time of conative activities, desires, wishes, strivings, etc., as inherent in the mind. So it must be understood that the acceptance of the "total reaction" conception does not limit us to the notion

⁽¹⁾ With regard to the relation existing between mind and brain two views are contended for—one that the brain originates, the other that it is only the instrument of thought. The discussion is metaphysical rather than physiological, because the phenomena observed in both cases are the same, and these depend upon the structure and quality of the organ itself. In this respect the brain is exactly similar to a nerve or muscle. It possesses properties and functions which it is our duty to study. Why it does so we are ignorant, and are content to regard them as ultimate facts in our science. In the same way, therefore, that contractility is a property of muscle, sensibility of nerve, growth of tissue, and secretion of gland, so we regard thought as a property of brain. But to avoid metaphysical subtleties, we are quite willing to say that it furnishes the conditions necessary for the manifestation of mind. (Prof. Hughes Bennett, "Lectures on Physiology, Pathology and Therapeutics," Lancet, April 25, 1863.)

of reflex mental and bodily activity only as being operative in life and behaviour, a hypothesis which is the negation of all dynamic conceptions in psychology.

The essence of the psychic mechanism and its underlying neural processes can be summed up in three words—activity, selectivity, plasticity. No hypothesis of mind which does not recognize this fact is of any service to either psychiatry or social psychology, and the conception of total reactions must be taken as meaning response to stimuli of all kinds, not only extra- but intra-psychic—thus preserving the idea of an "ego," a "self," an "experiencer," as a dynamic factor in mental mechanism. This hypothesis covers mental activity of all kinds, including conscious, unconscious, automatic and reflex.

As to the driving force behind the psychic mechanism and its underlying neural processes, its nature, whether it is intelligent or blind, whether it is a cosmic force or entelechy superimposed on the organism, or a force or entelechy generated in the organism and handed down through the æons of time from the mother-cell of organic life, are matters upon which the greatest thinkers in history have differed. Pure materialism has not solved the problem of life and mind, nor is it likely to, and there has been a return to the hypothesis of various forms of energy as a more likely solution of the "why" of everything, which includes the problem of the mind, i.e., human experience and behaviour.

"Soul is form and doth the body take." Spencer.

Morel says: "The soul and body are perfectly co-incident; the soul is prior to consciousness; it exists unconsciously from the formation of the first cell-germ." (Elements of Psychology.)

Laycock says: "The human mind is none other than the unconscious

Laycock says: "The human mind is none other than the unconscious working principle of intelligence individualized, and become conscious of its workings in the cerebrum."

As an actual fact, a reflex theory is accepted by a large body of psychologists and neurologists as a basis, not necessarily the sole basis, of a theory of mind which does not exclude a consciousness, a soul, a self, but recognizes that the mind for the most part functions subconsciously, unconsciously or automatically—tailing off into functions which are purely nervous and physiological.

To return now to these two schools, the physiogenic and the psychogenic, and their relationship to the physio-pathology and psycho-pathology of mind. A battle is now being fought similar to that which raged at the beginning of the eighteenth century; indeed it might be said, except for the Dark Ages, to have been continuous controversy from the early days of Greek learning. It

is not exactly materialistic Monism v. Dualism (1), for the existence of the mind apart from physical structure is no longer the question at issue. Generally speaking the bone of contention now is the nature of the mental machinery. One series of trends tends to keep alight the doctrine of the existence of the human soul, sees purpose in the activities of protoplasm and finds a place for this, and initiative and freewill in the mental mechanism: the other series of trends is towards a theory of mind based solely upon reflex action, to which I have already referred, and with which is associated the hypothesis of determinism of a more or less rigid character. At the one extreme is a "hormic," and at the other a "mechanistic" or "deterministic" schema. To the unbiassed both schemata throw a flood of light upon mental mechanics, and shorn of the inconceivable, unreasonable and unsupported deductions of the extremists on either side, greatly assist the clinical psychiatrist, who has to view his cases from both physical and mental aspects. They are not so incompatible as some would have us believe, and a wise aggregation of the trends of both schools is necessary for a sounder understanding of the nature and treatment of mental disorders.

It cannot be doubted that in the future, as in the past, the physiology of the nervous system and psychology will benefit by the study of the abnormal, and team work will facilitate progress by supplying more reliable and comprehensive clinical records than have been forthcoming in the past. To bring this about there must be such scientific division of labour and a more perfect association and a greater measure of co-ordination than now exist in this field of inquiry.

Though the physiological and psychological view-points, however much harmonized, will always be necessary to a clinical understanding of mental disorders, they are in a sense only means to an end—which is to establish psychiatry if possible on the firm basis of pathology, which is fundamental to all medical sciences. Freud recognized this when he stated that "The edifice of psycho-analytic doctrine which we have erected is, in reality, but a superstructure,

(1) In cosmology, monism is either materialistic or idealistic (spiritualistic or intellectualistic). Descartes introduced dualism into modern psychology in 1650. He taught that there were two separate substances—the thinking substance and the material substance. Spinoza, who succeeded him, was the father of modern materialistic monism, and assumed that there was one substance which showed itself from two sides—mind and nature. This monism later divided into spiritualism (Fichle's absolute "ego") and John Lock's realistic materialism. This was followed by Bishop Berkeley's doctrine of ideas as the objects of both perception and of knowledge and by Hume's denial of substantial souls. Realism views both mind and body as substances. Reid Stewart and Hamilton were realists; Comte, Haeckel, Spencer, Huxley and Tyndall were materialists; Kant, Leibnitz, Lotze and Hegel were idealists.

which will have to be set on its organic foundation at some time or other " (Introductory Lectures on Psycho-analysis, 1922).

In the meantime the psychogenic school declines to take into consideration the physiological point of view, holding that the introduction of physiological conceptions, and especially of physiological terms, would inevitably lead to confusion, and that the physiologist and psychologist must proceed separately along their respective roads. This, of course, is true, for, to arrive at sound physiological and psychological deductions, in the former, thoughts and feelings, etc., and in the latter, nerve-cells and nerve-currents, can find no place in the chain of arguments. There must, however, be correlation or there will be no essential progress, for the facts of physiology and bio-chemistry must ultimately be interpreted psychologically if they are to explain human experience and conduct. The danger is that the further psychology drifts away from the physical basis of life and all it means, the greater is the tendency to develop mysticisms and absurdities, which common sense rejects, and which it is to be regretted already characterize some of the teachings of the schools of individual psychology (1).

In this connection it is only right to remark that those schools of psychology which cling too closely to structure and physical mechanisms, and reject as invalid the experiences of the inner man and deny the existence of any forces in Nature which are not susceptible to scientific proof, tend also to make

(1) "A rational pathology must ever be based upon the basis of physiology. The physiological principle upon which we have to build a system of cerebral pathology is that mental health is dependent upon the due nutrition, stimulation and repose of the brain. How any combination of cells can be attended by processes of thought is, to us, inconceivable, but it is not more inconceivable than that similar combinations should result in the phenomena of life or that a combination of atoms should result in the movements of the solar system." (J. C. Bucknill, Journ. of Ment. Sci., iii, 1857, p. 287.)

"At the present time it is simply an impertinence—etymologically speaking—in anyone who has not made himself acquainted with the physiology of the nervous system, to vex a heavy-laden world with vague and vain psychological speculations." (Henry Maudsley, Journ. Ment. Sci., lii, 1865, p. 550.)

"The psychologist who has not prepared himself by a study of the organism has no more right to be heard on the genesis of the psychical states, or of the relations between body and mind, than one of the laity has a right to be heard on a question of medical treatment." (G. H. Lewis, *The Nature of Life*, para. 2.)

"Where physical phenomena appear abnormal there is mental disorder, which has its root in the mind, so far as this is manifested through the sensual organs; and has its root in the body, so far as this is the organ of the mind. To search after the phenomena in which these relations are revealed with the unprejudiced eye of experience, to investigate them scientifically in every point, that is of importance to the physician; and to collect them into one whole is the province of medical psychology." (Feuchtersleiben [1806-49], Medical Psychology, translated by the Sydenham Society, 1847, iv, p. 344.)

"In the clinical study of mental diseases, however, both sides of the question

"In the clinical study of mental diseases, however, both sides of the question must be examined; the psychological equally with the medical and practical, and both simultaneously and in an equal degree." (Griesinger, Journ. Ment. Sci., ix, 1863, p. 531.)

deductions which are equally repugnant to common sense and beyond human belief. Because we are scientifically ignorant of a thing, it does not necessarily follow that it does not exist. As Lord Balfour has justly said:

"The controversy about perception and the external world has been going on since 1710, and has been treated with great ability by successive generations, but it cannot honestly be said that it has been settled satisfactorily. It seems quite clear that if there is a piece of reasoning on which our whole practice of life depends, it goes back not to axiomatic truth, but to beliefs [1] no one can say were self-evident. Throughout the whole of life there are elements which no one can assert to be rational and self-evident, but without which we cannot carry on." (Times, December 10, 1925.)

The physiogenic school in recent years has moved with the times and broadened its outlook; it has therefore had more triumphs and made more headway than formerly in the elucidation of the physical processes underlying neural and psychic activities in both health and disease.

In essentials it is much more difficult work, calling for costly laboratories, specially trained investigators in many branches of science, and is delayed by the legal restrictions which beset experimental research. Another disadvantage is that the central nervous system is so situated that direct inspection and experimentation during life is impossible, except under very abnormal conditions. Much valuable knowledge, however, has been gained by experiment on animals, but animals cannot speak or understand language, and the results of the measures taken, whether surgical or chemical, are largely, if not entirely, limited to external observations, at the best incomplete, and may be productive of many fallacious conclusions.

Thus the physiogenic school has very largely to probe the problems of life in health and disease through the medium of dead matter (histology, cytology, etc.), and other indirect methods of inquiry, such as bio-chemical, serological, hæmatological, etc.

Progress along physiological lines must therefore be comparatively slow, and conclusions arrived at only after, maybe, years of sustained and painstaking effort. It should also be remembered that it is rare to find apparatus and technique ready for use. As a rule such have either to be newly devised and tested, or modified in some way, to meet the purposes for which they are required, and either may mean the expenditure of an indefinite time—possibly weeks, months, or even years, before the real problem can be tackled.

(1) Some of these were alluded to by Prof. Sherrington when he said that "The shaping of the animal body, the conspiring of its structural units to compass later functional ends, the predetermination of specific growth from egg to adult, the predetermined natural term of existence—these, and their ultimate mechanisms, we are, it seems to me, still at a loss to understand." (Presidential Address, British Association, 1922.)

However, valid conclusions, though slowly arrived at, have the advantage of being based upon carefully ascertained and concrete facts and are thus more likely to be dependable than those based upon the shifting sands of abstractions. Inquiry along purely psychological lines means more inexactitudes, because the facts dealt with are of a more elusive nature, and the conclusions are not always susceptible of precise and scientific definition. History shows that the work of the physiogenic school has reacted in the sphere of psychiatry in a way which not inaptly may be called protopathic, and the effects have been wide-spread, deep, massive.

I fear there has been too much time wasted in attempting to delimit accurately these particular sciences and in defending the scope of each from the intrusion of the other. I have no doubt in my mind that the day is approaching when, in place of ignoring or making war on each other, these schools will be brought to recognize that their view-points are not opposed, but complementary, and, while following their trends separately, will agree to collaborate, and in this way build up that more synthetic biology to which I have already referred, which would have fundamental concepts, view-points and methods which would command general recognition and acceptance.

The wards and laboratories of mental clinics and hospitals afford one ground at any rate for the closer approximation of the work of these rival schools, and our Association can encourage it by retaining within its fold all schools of psychiatric thought. This it can do by members who hold diametrically opposite views being kinder to each other, both on paper and in debate, than I fear they have been in the past. It has been well said that "one should at least respect if one cannot share the conviction of others" (Morgan).

It should be realized that truth is no longer regarded by science as absolute and static, but as relative and dynamic, and therefore many-sided, and that because one view does not at once conform with another, the other is not therefore wrong. From analysis of views there should follow synthesis and the formulation of more comprehensive concepts enabling us to see further and approximate more towards scientific truths.

The modern physiogenic school holds that the different forms of mental disorder can be explained by the study of disease processes in the nervous system and other organs of the body, and that the symptoms of mental disorder can be conceived in harmony with the principles of general pathology, as in the case of other diseases and disorders to which the flesh is heir. In other words, the psychiatrist of this stamp views mental disorder in exactly the same way as he views physical disorder, and looks forward to the time when

mental disorders will be systematically classified, according to the nature of the pathological process at work, as "disease entities," each with a definite cause, course, and outcome, and up to recent years this school has busied itself chiefly in searching for anatomical and pathological explanations of disorders of mind. The great stimulus given to this view-point was the work of Bayle, Calmeil, Esquirol and Haslem in relation to general paralysis of the insane over a century ago.

As methods of histology and cytology became more precise the neuron was defined, and the discovery that the nervous system was built up of such nerve-cell units laid the foundation of a physiological conception of the brain as the principal organ of the mind. Anatomists, physiologists, neurologists, pathologists and psychiatrists have all contributed to this end.

The physiogenic school thus performed a signal service to psychiatry in reversing the older position that madness was a disorder of mind only, and had no relation to disease or morbid changes in the body.

Nissl later demonstrated brain changes in katatonia, which was followed by the discoveries of Alzheimer and Binswanger, who enriched the field of cerebral pathology by describing the brain changes which followed upon arterio-sclerosis.

The entry of bacteriology in the field and the demonstration of the *Spirochæta pallida* in the brain by Noguchi and Moore, sent to the waste-paper basket a vast accumulation of psychiatrical literature on general paralysis, and scrapped the treasured ideas of many great men on the causation and pathology of that disease.

I cannot follow out all its trends, but its development has been along the lines of bio-chemistry and body metabolism, serology, etc., and latterly of the *rôle* played by the vegetative nervous system, endocrines, antacoids and toxemias in mental disturbances.

Its most notable and far-reaching contribution of recent years to the pathology of mental disorders has been the defining of the physiogenic basis of dementia præcox by Sir Frederick Mott.

Now the importance of Sir Frederick Mott's work does not lie solely in supplying the pathological data of a clinical entity which has been misnamed dementia præcox, but in a much wider relationship. Dementia præcox as a clinical entity may, in time, disintegrate; in fact by many psychiatrists it has never been accepted, and its original conception has not entirely withstood the onslaughts of its critics. But even if dementia præcox as a clinical entity becomes nugatory, Sir Frederick Mott's work in this connection will be monumental and mark an epoch in the history of pathology of

mental disorders equal to that of the discovery of the physical basis of general paralysis. He has shown that a series of cases of mental disease at present clinically classified as dementia præcox is associated not only with static changes in the nerve-tissues and other organic structures, such as the gonal and adrenal glands, but also with definite and wide-spread biochemical and dynamic disturbances involving not only these structures, but also the body metabolism and the vital processes of the whole organism. As regards cases which apparently recover, Sir Frederick Mott takes the view that there has been merely suspension of function due to inactivity or disordered function of the neurones at the psychic level. In the irrecoverable cases there is suspension of function at the same level, associated with and dependent upon an organic defect of the nucleus. He insists upon a primary "inherent germinal narrow physiological margin of normal functional capacity of the brain" being present, which surrenders to stress-physiological, psychological or pathological.

He shows, giving chapter and verse, that mental disease is not merely a brain disturbance, but a biological failure affecting the whole individual—a view which was also held by Clouston, who taught that "the whole class of 'mental diseases' should be regarded and treated not as local disturbances but as wide-spread departures from the normal physiological condition of the whole organism" (Fourn. of Ment. Sci., April, 1925, p. 217).

Now, as I have already remarked, these well-founded conclusions were based upon clinical material sufficiently conforming to the entity of dementia præcox to be regarded as such. It is to be noted, however, that this material came from several sources and was diagnosed by divers clinicians. We all know the difficulty in arriving at such a diagnosis, and even Kraepelin admits that in many such cases no conclusions can be arrived at until they have been studied for many years. Omitting the frankly toxic and organic psychoses, epilepsy and the psychopathic reactions, the remainder of the mental diseases may be roughly proportioned between two groups—manic-depressive or cyclothymic psychoses and the schizophrenias. These represent two biogenic reaction types, the cyclothymic (syntonic of Kretschmer) and the schizoid (Bleuler). The former reaction, in a mild degree, may be said to be a normal characteristic, but the presence of the latter in normal people would be characterized as peculiarities of mind and conduct. The important point, however, is that exaggerations of these reactions, each in different degree occur in the one person, and when they materialize as manic-depressive insanity or schizophrenia (dementia præcox, paraphrenia, etc.) the clinical picture is confused

and the diagnosis between them difficult and uncertain. Thus these mental states represent groups of cases, and more frequently present themselves as mixed rather than as pure forms. Further confusion arises by reason of the occurrence of mental symptoms associated with toxic and exhaustion factors. As Bleuler states: "Except in the rare extreme cases we no longer have to ask, is it manic-depressive or schizophrenia? but to what extent manic-depressive, and to what extent schizophrenia?" We make our diagnosis and prognosis accordingly. In my opinion, having regard to these considerations, we may consider that this work of Sir Frederick Mott may form the basis of a physico-pathology of a much wider group of mental diseases than the schizoid, and that its further development in accordance with carefully observed clinico-pathological data, complete as far as possible in every detail, is of the utmost importance.

The point I want to drive home is that if Sir Frederick Mott's fundamental work is to bear fruit, these carefully observed and comprehensive clinico-pathological data should be forthcoming, and I think it is the duty of the mental hospitals to supply the clinical data by means of team work so essential to this end.

Many pages of our Journal have latterly been devoted to the recording of research work; but much of it, I fear, has to be regarded as valueless because of the obvious uncertainty as to the nature and clinical type of case to which it has reference. If you will take the trouble to look through the *Journal of Mental Science* for the last fifteen or twenty years you will find records of brilliant research work from time to time which has no sort of application now for exactly the same reason. This is why much of it has been either forgotten or discredited and has not gone to build up a well-founded pathology as it should have done. A good deal of the ground will need to be gone over again under better auspices.

The only other aids to clinical psychiatry I would mention here are the various phases of practical sociology. These I will mention when I come to sketch a clinical examination system.

I should like here to quote the words of Barker, who was inspired by Meyer, as to the magnitude of the task before psychiatry.

"Psychiatry has, surely, no narrow conception of its plan of work. The technical knowledge demanded for a successful attack upon all its problems is enormous. The methods of a whole series of subsidiary sciences must be drawn upon. No single investigator, of course, can hope to be active in all parts of this large and varied field of inquiry. Not even the collective activities of the members of a single psychiatric clinic can cultivate more than a small portion of the field. The work is cut out for the aggregate of the world's psychiatrists for at least many generations ahead." (Amer. Journ. of Insanity, 1xx1, 1014, p. 28.)

The progress of clinical psychiatry has been held up by (I) dissociating mind from body; (2) dissociating the nervous system from body; (3) neglecting sociological considerations. The object of organized team work in mental clinics and hospitals is to make up for the time thus lost, and the sooner we get to work the better.

THE BASIS OF TEAM WORK.

Now the basis of team work as applied to clinical psychiatry is the frank recognition of the fact that that just as the normal mind is dependent for its activity upon the complex biochemical and physiological processes occurring at all functional levels of the nervous system (to which must be added certain endocrine and autocoid activities), hereafter to be designated the neural machinery of mind, and upon the harmonious interactions of all the organs and tissues (Mott), to be hereafter known as the accessory physical states, so a case of mental disorder or disease can never be regarded as a purely psychic problem, but in addition implies a correlated disorder or disease of the physical machinery of mind and possibly disordered or diseased accessory physical states; and these two aspects, psychical and physical, are so closely interwoven and of so complex a character that the skilled collaboration, not of one but of many branches of mental and medical science is essential to their determination.

Though the nature and significance of the morbid functioning of the physical machinery which is indissolubly bound up with the morbid psychic manifestations cannot as yet be formulated with any degree of certainty except in those few cases where definite biochemical or organic changes have been established, they must, nevertheless, always be present (1). Morbid accessory physical states, when present, have a variety of relationships and potentialities in regard to the mental state, and it is important from a clinical point of view to distinguish these from the former.

(1) It may, then, be assumed, theoretically, that in cases of mental disorder this physical machinery of mind fails functionally, or functionally and organically, as a result of morbid conditions (a) originating in itself or (b) occasioned (2) by psychic experiences.

(1) Haller (1708-1777) referring to mental diseases, said: "When, in some rare instances we can discover no disease of these parts (the brain), we may conclude either that it is seated in their very elementary particles or has not been sought for with sufficient patience and attention." (Elements of Physiology.)

(3) I am conscious of the fact that in making this assertion I am disobeying both empirical and ideal canons of scientific causality. The latter is absolutely inapplicable, and, as regards the former, it is conceivable that "hereditary influences" might be the origin of both the psychological and physiological phenomena. I know of no other common factor, let alone its nature, and since the view I have taken is useful, in accordance with common sense and not opposed to practical experience, no other course appears open to me.

Both of these are best regarded as primary mental disorders, and it is important clinically, whenever possible, to make this distinction, as both prognosis and treatment may be vitally affected thereby; for the immediate ætiological factor in one is neural and in the other psychic. In both these types of mental cases morbid accessory physical states may occur.

- (2) It may happen, however, in other cases, that those healthy physical states which are accessory to the functioning of the normal mind become morbid and upset the neural machinery of mind, and thus become primary or exciting causes of secondary mental disorders. It is also very important to separate these secondary from primary mental disorders for very obvious reasons. The difference again is a fundamental one (1).
- (3) I desire to draw your particular attention to my fourth assumpton, which is that those morbid accessory physical states I have described as occurring secondarily to primary mental disorder almost invariably carry with them mental symptoms which are blended with, but can often be distinguished from, those of the primary mental disorder.
- (4) In cases of mental disorder secondary to morbid accessory physical states the former may engender further and secondary physical disorders.
- (5) And so it usually amounts to this: That in most cases of acute mental disorder a vicious circle is established-a constant reaction of mind on body and body on mind-leading to the complicated clinical picture they, for the most part, present. We can imagine a psychic stress or shock operating through the endocrine and vegetative nervous system, causing dysfunction in the highest psychic realm, which then reacts on body metabolism and lowers the activity of the protective agencies against infections, with resultant toxæmia of the cerebral cortex and other parts of the nervous system, producing marked psycho-motor excitement, hallucinatory phenomena, mental confusion, etc., which is again followed by further bodily disturbances, etc., and so on almost ad infinitum. The process may have had its starting-point anywhere in the vicious circle thus established, in which, however, it often becomes lost. It is this interlocking and intertwining of mental and physical states which is the business of the clinical psychiatrist to unravel and afterwards to establish their correlation.

Nothing is more true than the observation of Putnam that

⁽¹⁾ Jacobi and his adherents in the German somatic school taught that mental disorder had no existence. Insanity was an associate of bodily disease. This view should not be confused with that of the physiogenic school of England and Exance.

"Bodily processes are a sounding-board for mental processes and vice versâ." (Boston Med. and Surg. Fourn., July 21, 1910).

THE AIM OF TEAM WORK.

The aim of team work is to supply the psychiatrist responsible for the diagnosis and treatment of the case with a complete clinical picture, including its pathology and psycho-pathology and ætiology; taking advantage of every avenue of approach—physiological, psychological, sociological, etc.

According to the views I have set forth, the physico-pathology and psycho-pathology of mental disorders, though separate conceptual systems, are merely two aspects of the raison d'être of morbid mental phenomena. Strictly speaking one cannot be abandoned in favour of the other, and philosophically they are equal, though in their application to particular cases one may be of more service than the other. As I have already stated, the criterion of scientific truth nowadays is, above all, utility, and the coming of a more comprehensive science of biology will perhaps bring with it a comprehensive pathology of mind.

Clinical psychiatry cannot take up an ex parte attitude in respect of the factors operating in a case of mental disorder, and must, as far as possible, dissociate itself from leanings towards any one view-point, or one of the main objects of team work will be defeated. Clinical psychiatry has too long suffered from such one-sided investigations, which have culminated in the accumulation of much unbalanced knowledge in regard to mental disorders and diseases.

First place must be given to the view that by the time a case comes to be investigated, many morbid processes, both physical and psychic, may be in operation, and team work only can decide on their presence, their relative preponderance, their relationship one to the other and their significance. It cannot be assumed that in any one case psychogenic factors alone are at work, even if the results of a thorough physical examination are nil; nor can it be concluded that, because there are well-ascertained physical factors operating, psychogenic factors are absent. The conclusions arrived at must be based upon positive findings, not assumptions.

It must be borne in mind that the cases dealt with by the clinical psychiatrist are heterogeneous. They have only one common feature, *i.e.*, disordered mentality.

Kraepelin, in Ends and Means of Psychiatric Research, says:

"What at the outset presents itself to the alienist's observation is a jumble of pictures, some of them stable, others variable, compounded of the most miscellaneous details." (Journ. Ment. Sci., lxviii, 1922, p. 116.)

I think we may safely say that prior to the discovery of general paralysis in the first and second decades of the nineteenth century the conception of mental disease as disease-entities, specific forms or disease processes did not exist. For the most part humoral pathology held sway, though Cullen had protested and said that it was in the examination of the brain that the nature of mental disorders would be found. There were also fanciful and superstitious notions I need not enter into here. The discovery of general paralysis turned the minds of psychiatrists definitely in the direction indicated by Cullen, but it was Kahlbaum, in 1863, who first drew a sharp distinction between the manifestations of mental disease and the disease itself (1). I need not pause and describe the dead and decaying remains which are to be found strewn along the highway traversed by psychiatry in its search for disease entities, specific forms, etc., of mental disorders pursuant to the endeavour to link up the conception of mental disease with that of physical disease. They are many and interesting, and some retain evidences of animation and are still to be found in the official classification of mental diseases and disorders of our Association. Apart from these there are others which all along have had a surprising vitality, dating from Græco-Roman times, and certain predominating symptoms of mental disorder continue to be treated as mental diseases. They are, in the main, merely phases of such, and they survive because our existing methods of investigation in individual cases fail to reconstruct the past or forecast the future and because our efforts to build up a general pathology or psycho-pathology have not yet been adequate.

Some success, however, has met these efforts, and a number of more or less stable disease forms, clinical or symptomatological entities, and genetic conceptions which we call symptom-complexes or syndromes, have been separated out and have been more or less generally recognized. Unfortunately these cover but a tithe of the ground, and a great mass of cases remain unclassified and are loosely designated (2). The necessity too, in certifiable cases for fitting each case into a rigid classification for official purposes and

⁽¹⁾ The clinical method of investigating mental disorders yielded katatonia (Kahlbaum), hebephrenia (Hecker), adolescent insanity (Clouston), amentia (Meynert), circular insanity (Falret), progressive delusional insanity (Regis), manic-depressive insanity and dementia præcox (Pick and Kraepelin), anergic stupor (Newington), etc.

(2) "In view of the facts that no system of classification has yet been found

^{(?) &}quot;In view of the facts that no system of classification has yet been found which will, without forcing, account for all the cases which present themselves, and that the founders of systems the most widely adopted in their time, admit that in a fourth to a third of their cases an absolutely certain diagnosis is impossible, it is evidence that a sufficiently extensive field still remains unconquered." (Farrar, Amer. Journ. of Insanity, 1905, p. 448.)

allotting to it a mental cognomen has not helped matters. There is much truth in the observation of Farrar that—

"The zeal for finding, as soon as possible, a diagnosis, after which, through the arbitrary satisfaction of having 'catalogued the case,' searching observation of the patient relaxes, cannot but be pernicious." (Amer. Journ. of Insanity, 1905, p. 448.)

Thus one would like to state, for instance, that a case is suffering from general arterio-sclerosis accompanied by deep depression and other mental disturbances. Instead of this one has to say that he is suffering from melancholia, and that in regard to his physical state he has general arterio-sclerosis. Now he is certainly not suffering from melancholia or manic-depressive insanity—a clinical entity occurring at all age-periods accompanied by a variety of physical concomitants. Thus the inclusion of every case presenting depression as a dominant mental feature under manic-depressive insanity has led to the manic-depressive conception being discredited. Many instances such as this could be cited. Team work will help to put an end to this confusion and go to restore some order in our conceptions of the nature of mental disorder.

Barker, looking into the future in 1914, said:

"Clinical syndromes will be multiplied or reduced as further knowledge permits of greater discrimination on the one hand and of better synthesis on the other. Psychological classifications will arise on the subjective side, while on the objective side pathological, histological, chemical, physical and biological classifications will be established; and most important of all, we shall ultimately arrive at the groupings which are so important for prevention, namely, the ætiological." (Amer. Journ. of Insanüy, lxxi, 1914, p. 20.)

Referring to the clinical types already established, Kraepelin goes on to say:

"Many of these diseases, of course, are still very imperfectly understood and insufficiently distinguished; yet a large proportion of them offer very useful points of attack for a systematic investigation of their causes and nature. So long as disease forms were set up with a sole regard to outward aspect at a given moment, an investigation of the conditions that produce them could naturally never lead to any useful result, for we had always to do with a mixture of the most heterogeneous processes, and no uniform causes were present. Hence the hopeless obscurity of the old teaching, which for every disease made all possible causes responsible, and on the other hand ascribed to the same injurious factors the most diverse affections. To-day, however, we start from the principle that behind similar morbid processes there must somewhere or other be a similar noxious influence that has produced them, and that from the observed effect we can infer a definite cause."

Hoche disapproved of Kraepelin's disease-entities. He taught that syndromes, *i.e.*, unified symptom-complexes, founded on nervous dispositions and variously grouped, were conceptions of greater utility.

What is needed now is to review those disease forms, clinical types, syndromes, etc., which have already been arrived at, revising,

casting adrift and stabilizing as the case may be, and also a thorough attempt on a large scale to deal with the unclassified remainder, sorting them out in new combinations as regards symptomatology, disease processes, life-history and course, and taking special care not to confuse those mental disorders apparently primary with those secondary or merely symptomatic of general or local physical diseases. This unravelling presents a problem of some difficulty, for it is conceivable that all mental disorders have a psychogenic origin, and that morbid physical and external factors merely "let loose a malady prepared by inner causes."

"It is known that control which has been acquired through the school of experience can be easily disturbed, for instance, by such a simple cause as fatigue or by intoxication or accident. When, therefore, the power over the reactions, and especially over the emotional reactions, is weakened, an opportunity arises for any hitherto more or less successfully combated cause of emotionalism to interfere more seriously with the processes of perceiving, thinking, feeling, judging and reacting; false judgments are then very apt to occur and the patient develops a mental illness. The physical illness cannot be considered the direct cause of the mental disorder. It acts indirectly by altering the nutrition of the nervous system, so that distressing ideas and emotions assume an exaggerated influence and prevent an adequate adaptation to all the stimuli received in the course of the daily routine." (Rows and Dallas Ross, Second Rept. Nat. Council for Ment. Hygiene, p. 26.)

The first step, however, to the solution of this problem is undoubtedly the separating out of further stable clinical types of true or primary mental disorders. It is in regard to this type of case that research work in its several branches is likely to be most fruitful in the field of physico-pathology and psycho-pathology of mental disorders.

Some Practical Aspects of Team Work.

Coming now to team work in its more practical aspects, *i.e.*, its application to individual cases, the following postulants are deserving of consideration:

- (I) That a searching psychological examination cannot be undertaken effectively until psycho-motor and psycho-sensory and emotional disturbances commonly associated with gross toxæmias, exhaustion and other abnormal physical states which when present conceal the real state of mind, have been cleared up or are well on their way to being dealt with successfully.
- (2) That it is being established in a great and increasing number of instances of mental disorder that there are important relationships, either of cause or effect, not only with morbid physical states more or less readily ascertained, but with subtle changes in metabolism and in the functioning of the endocrine glands and vegetative nervous system and with toxemias obscure in character and origin.

- (3) That, although mental symptoms may largely disappear on the successful treatment of the associated morbid physical states, yet with few exceptions such cases will still require mental readjustment before they can be said to have recovered.
- (4) That even after most effective physical treatment the mind may remain greatly disorganized, but such cases are then in a better position to respond to psychic treatment.
- (5) That, although team work aims at the establishment of general principles upon which to found a pathology and psychopathology of mental disorders, it recognizes that every case of mental disorder has a pathology and psycho-pathology personal to itself, and that the psychiatrist must above all avoid reading into individual cases specific types of mental disorder while investigations are proceeding. An open mind as regards diagnosis and classification must be kept until the investigations are complete in every particular.

From a consideration of the foregoing there would appear to emerge, for the clinical psychiatrist to encounter, the following principal groups of cases:

- (a) Cases of mild or severe mental disorder associated with morbid physical states, upon the removal or alleviation of which the mental symptoms largely or entirely disappear. Many require further psychic treatment before complete recovery.
- (b) Cases of deeper mental disorder with superadded mental symptoms commonly known to be due to the presence of morbid physical states. Upon the latter being satisfactorily dealt with, grave mental disorganization is found, requiring psychic investigation and treatment, which now becomes possible.
- (c) Cases of acute mental disorder in which the physical state after searching examination is either normal or shows disturbances undoubtedly of psychic origin. Psychic investigation and treatment are indicated and a psychogenic causation may be assumed. Psychic treatment may be assisted by simple remedies directed towards the alleviation of any physical distress that may arise.
- (d) Cases of mental disorder of insidious development and tending towards mental deterioration associated with obscure and so far only partially ascertained morbid physical changes. These cases form material for further special research work, pending which treatment will remain largely empirical.

(e) Cases of mental disorder associated with congenital brain defects and with destructive lesions of the brain.

Although the preliminary or concurrent "cleaning up" of the physical side of cases of mental disorder presents practical difficulties, yet it is very essential that this should be done, and well done, if psycho-therapeutic measures are to be really successful. When neglected, or done incompletely, the best result can only be an alleviation of symptoms and a relapse sooner or later—which not uncommonly occurs. My own experience convinces me of this. I have known cases relapse more than once, and when ultimately it has been possible to recognize and treat successfully some accessory physical state, such cases have afterwards remained well.

What measure of success, I ask, can attend any method of mental treatment while the nervous system continues to be poisoned by toxins from focal infections, auto-intoxications from alimentary, renal and liver disorders, or while there is present acute exhaustion, insomnia, inanition, cardiac trouble, anæmia, etc.? Mental treatment under these conditions is largely a waste of time and energy and leads to disappointment and scepticism. Furthermore, in such cases the mind is usually inaccessible, and our mental examination is mainly objective. We are obstructed by a wall which shuts in the mind and keeps out the psychiatrist, and this wall must be breached and thrown down, for then, and then only, can we enter and subdue the enemy.

The great advantage I can see to clinical psychiatry of attaching mental clinics to general hospitals is that the team work necessary for a thorough physical survey of the mental patient is at hand. Such clinics could also undertake this work for the psychiatrists treating private cases.

I am one of those who think it folly to wait until there are sufficient mental clinics to overtake all occurring mental disorder before making a commencement at putting clinical psychiatry generally on a sound working basis. I cannot see, even in the most favourable circumstances, an efficient clinic system being established for this purpose throughout the country under a quarter of a century. But affiliation and reciprocity between mental and general hospitals is both an immediate necessity and practicable. There are also wellfounded objections to the policy of scrapping the public mental hospitals, in as far as they are institutions for the treatment of acute cases, even if the public could be persuaded to take that course. Visions of what might be done must not make us blind as to what can be done. The fears some psychiatrists have that any attempts to make the public mental hospitals thoroughly up to date clinical institutions might delay the very desirable establishment of clinics, especially in connection with general hospitals and infirmaries, are, to my mind, groundless. The projected mental clinics are primarily intended to cover a wide field of mental disorder which does not reach the mental hospitals and is at present practically untouched. Both mental hospitals and clinics will need to work with full steam up for many years before clinical psychiatry can range itself alongside other branches of medicine. By whatever name a mental institution is designated, if its work be successful, admission thereto will be sought. It is time enough to talk about scrapping the public mental hospitals when there are too many other curative agencies in the field.

Nothing of the foregoing, I trust, will lead anyone to think I under-rate the importance of purely psychological methods of inquiry and treatment. As one who believes that the most practical and profitable view of the relationship between body and mind is that of "interaction," my attitude to psychological methods is optimistic rather than otherwise, and it is because of this that I am anxious they should be undertaken in the most favourable circumstances.

Psychological methods have a prominent place in team work, and no one clinical psychiatrist can claim to be really expert in all of them. Some are of such a nature that constant special study and practice is necessary in order to acquire and retain efficiency. The present arrangements in regard to clinical psychiatry in most mental hospitals renders this specialism largely impossible, for the division of labour among the medical officers is more in accordance with type and number of patients than method of investigation and treatment. This may be satisfactory in so far as chronic and incurable cases are concerned, but it falls short when applied to recent and curable cases.

Team work is also of importance in respect of the ultimate disposal of cases. As everyone here knows, it is a most difficult matter to decide whether or not a patient has progressed sufficiently towards a state of recovery to warrant his return either permanently or temporarily to his ordinary life and avocation.

Some twelve years ago I wrote (Annual Report Horton Mental Hospital, 1914):

"What is meant by 'recovery' as applied to mental disease? Judging by the marked variation in the recovery-rates in the various mental hospitals, there would appear to be considerable difference of opinion on this subject. The success or non-success of treatment and the character of the admission cannot altogether answer for the very different results apparently obtained, although to an extent they do. By some, a patient is accounted 'recovered' when he resumes a state in which he can do without institutional care and treatment. Others would call a patient 'recovered' when he resumes the state of mind he was in prior to the attack; he may have a moderate degree of congenital feeble-mindedness. Others insist upon a very high standard of mind before labelling a patient 'recovered,' i.e., there must be no sign of mental abnormality. A lot depends upon the care taken in examining patients for discharge, which should be as searching as on admission. I hardly like to dogmatize on what should constitute 'recovery.' My practice is to take a broad view that there are many degrees of normality of mind consistent with sanity."

Freud says "a cure is the restoration of productive ability and the capacity for enjoyment." Stekel defines it as "the conquest by the neurotic of his tendency to isolation, a regained capacity for work and sexual activity, and abandonment of phantasy in favour of reality," and Jung as "a maturity of character, due to conscious understanding and assimilation of the undeveloped parts of the personality enabling the patient to adapt himself to the claims of life which he had hitherto—wittingly or unwittingly—failed to face."

Veraguth lays stress on the subjective conviction of the erstwhile patient that his personality has grown—a feeling not of ability to work but of self-application to work; not of capacity for enjoyment, but of determination to enjoy; not of adaptation to the demands of life, but of a personal choice between adaptation and resistance. A further and peculiar sign of cure is the sense of gratitude for his former treatment." (Lancet, 1925, ii.)

The conclusion to be drawn from all this is that a definition of the term "recovered" which is capable of general application is impossible and does not and cannot exist.

What constitutes "recovery" is indefinable, and depends upon the normal mental "make-up" of each case (which differs in every individual) and upon the environment (which also differs in every case) which the "make up" has to contend with upon discharge.

The importance of team work in this connection cannot be overestimated, for it implies the same thoroughness and, according to the nature of the case, comprehensiveness of examination of the patient for discharge as on admission.

It has always been a maxim with me—and I fancy with others too—that the case should be taken again before a decision is come to as to disposal. In the first place, if a patient has been suffering from a curable mental disorder he should not be considered as having entered a chronic stage until at least three years have elapsed and he has been searched for every possible cause and every avenue of treatment has been explored without success; and, secondly, the criterion as to his fitness to leave hospital should be (a) that hospital treatment cannot effect further improvement, and (b) that the environmental conditions he has to face are favourable to the continuance of his improved mental health. These conclusions should be arrived at quite apart from the question of certifiability and his involuntary detention in hospital.

An examination of cases which have relapsed within a short period after leaving hospital shows that our present methods of examination of patients on discharge falls short of what they might be if a better system were adopted—just as they do in regard to patients admitted, and I am convinced from my own experience that many

patients leave hospital just when psychic treatment becomes possible and should be beginning, since it is the grosser mental symptoms only that have subsided. Sometimes they are discharged in a mental state which is little better than that presented by some mild cases on admission.

Take, for instance, the common case of a woman who presented on admission acute excitement with hallucinatory phenomena, insomnia, a degree of incoherence, and perhaps some confusion and clouding of consciousness. There are physical symptoms pointing to some general toxæmia and also a considerable degree of exhaustion. Under appropriate measures the mental symptoms die down, the physical state improves, and the patient begins to go about the ward like an ordinary person and perhaps to occupy her time with some useful work. Very soon, however, she commences to clamour for her discharge on every possible occasion despite the fact, which is pointed out to her, that there is not the slightest urgency for her return home, and that she had better take advantage of the opportunity of becoming thoroughly well. On mental examination the most we ascertain is that the mental symptoms prominent on admission are now absent and, apart from her irrational attitude towards her continued absence from home, there is apparently little superficially in her mental state to complain of. Her appeal for discharge is acceded to, and a few months later she returns to hospital. From the examination made on readmission we are soon convinced that she was not near the stage of "recovery" when last discharged. We find that her frantic appeals for discharge were a symptom of deeper mental trouble-psychic traumas, repressed complexes, unsatisfied desires, inferiority complex, etc.—which had paved the way for the train of symptoms, both physical and mental, which led to her certification in the first instance. The same morbid mental processes have continued after discharge and now include within their scope the main incidents of her previous residence at the hospital, which are slowly but surely being repressed into the unconscious. She denies that she was ever mentally ill, prides herself on her mental soundness, declares that our records of her belong to some other patient, etc. There is a complete loss of insight and she resents bitterly her return to hospital. Possibly all chance of making up for time lost to treatment by her discharge is gone.

It may be argued that the course would have been just the same had the patient not left hospital care; nevertheless it cannot be gainsaid that had the patient been examined at the first favourable opportunity after admission and again when proposed for discharge, by a team of mental experts skilled in the finer methods of psychological investigation, the facts would almost certainly have been brought to light and the opportunity afforded for appropriate treatment.

The most critical time in the course of many cases of mental disease is not when psychic symptoms are most manifest, but on the return of a conscious realization of the reality of events and things. A failure to make the best of the opportunity thus offered of a deeper examination into the mental state may be fatal to recovery.

The principle of team work should be applied to all recent cases of mental disorder, whether they are in private care or have been admitted to private or public mental hospitals. Much of what I have to say is applicable to psychiatrical team work wherever undertaken, but, as the great majority of cases are cared for in public mental hospitals, it is in regard more especially to the latter that I shall address myself in this connection.

The team-work ideal in clinical psychiatry is by no means unknown in these institutions. It must therefore be understood that my remarks are designed to be helpful to its better organization rather than a criticism of present practices. No one deplores more than I do the economic and other difficulties which stand in the way of progress in clinical methods in public mental hospitals, or puts a higher value on the fine medical work in progress which I am constantly reminded of by the papers submitted to the Editors of the Journal for publication.

Now to establish or further develop team work in public mental hospitals will mean in the first place a reorganization of the work of the medical staff, and secondly the addition to it of specialists and experts in various other branches of medicine and, where necessary, those of some of the special branches of clinical psychology. Only after coming to a decision on the first proposition can the extent in the need for the latter be ascertained.

How to put to the best possible use the psychiatric staff we now possess is, then, the first question. To accomplish this it will be necessary, as I have already mentioned in passing, for the division of labour in regard to the clinical work to be based more upon the methods of inquiry and lines of treatment than on character and number of patients. As little as possible of the time of the skilled psychiatrist should be spent on the chronic insane. Much more of the supervision and general care of this class of patient should be entrusted to nurses and other lay officers who in these days are sufficiently highly trained to take on more responsible work than formerly. Of course the infirmaries and those wards accommodating the chronic turbulent cases would need, as at present, frequent medical visits. But the quiet unproductive chronic and the industrial patients can, I think, be over-doctored—especially the latter. The more these patients can be left in the hands of trained

matrons and head nurses, vocational officers, recreation officers, etc., the better. They should be encouraged to regard themselves no longer as patients needing constant medical attention, but as ordinary residents in a community of which they form, temporarily at least, a necessary and important section—thereby encouraging their self-respect and self-reliance. They should be allowed every possible freedom, frequent leave of absence to visit their homes, and, above all, be suitably rewarded for their work. I have no doubt in my mind that when voluntary admissions are permitted in public mental hospitals, many of these patients could be given a voluntary status. Some no doubt would come and go several times before settling down permanently at the hospital. A visit more than once a day by a medical officer is a waste of time. He can be much better occupied otherwise. A daily visit should therefore suffice; but otherwise, apart from occasional surprise visits, he would attend when summoned. Under such a policy I am sure the unemployed chronics would become a diminishing quantity.

I have for long held the view that much of the routine medical work in regard to the care of the chronic insane could be undertaken, under expert supervision, by medical men who have not been specially trained as psychiatrists. I see no reason why many of our chronic wards, and some of the infirmaries, should not, therefore, be allotted to general practitioners in the neighbourhood of the hospitals for a fee per attendance as visiting physicians, or whole-time practitioners employed, who on the score of age would be glad to retire from general practice for this purpose and give place to younger men from the schools.

During the war, and since, such practitioners have done good work in suitable wards of the mental hospitals. There are distinct advantages in associating local practitioners with the work of the hospital, as favouring that wise policy of opening the doors of mental hospitals to as much outside influence of a suitable kind as possible. If I had my way the "house" staff of a mental hospital would consist of (a) psychiatrical specialists, (b) visiting or resident physicians. Among the latter would be temporary medical officers who desire to gain experience in mental work prior to entering into general practice. All mental hospitals should afford this opportunity, which I am told is a common practice in Scotland, for the more the general practitioner knows about mental diseases the better for the community at large. It means ultimately a saving to the public purse.

As to what could best be done to free the trained psychiatrists from work in connection with the chronic insane and from minor administrative duties this would no doubt vary according to the circumstances of each mental hospital, but I think there will be general agreement that it should be done as far as possible. Having arranged for this, the remainder of the time and energies of the medical officers could then be concentrated on recent and acute insane, for I would have every one of them take a due share in the work of the team.

THE PSYCHIATRICAL TEAM.

Purposes.

- I. Ascertainment of family and personal history. Report of environmental conditions. History of present illness.
 - 2. Examination of the case on admission-
 - (a) Psychological.
 - (b) Physical: (1) Systemic.
 - (2) Chemical.
 - (3) Bacteriological, serological, hæmatological,
 - 3. Diagnosis and categorization.
 - 4. Lines of treatment.
 - 5. Consultative.
 - 6. Examination for disposal.

Special Accommodation.

- I. Examination and treatment rooms.
- 2. Dental surgery.
- 3. X-ray and electrical department.
- 4. Dental surgery.
- 5. Clinico-pathological laboratory.

Personnel.

- 1. The medical officer in charge, or chief or clinical director.
- 2. The house staff, supplemented as necessary by visiting specialists in order to obtain the following reports: (a) Psychological; (b) general diseases; (c) neurological, including vegetative nervous system and endocrines; (d) dental; (e) ear, nose, throat; (f) eye; (g) gynæcological; (h) X-ray and electrical; (i) laboratory findings.
 - 3. Laboratory assistant, X-ray assistant, photographer.
 - 4. Field workers.

Superficially this looks a formidable proposal, especially for smaller institutions far away from towns and cities from whence co-operation might be expected. A closer examination, however, shows that it may be easier of attainment than would at first appear. Even if the proposal cannot be carried out in its entirety it can be approximated to, and radical improvements in clinical work thereby effected.

It is always advisable to commence from small beginnings and advance slowly, consolidating as experience directs. A structure hurriedly raised without due thought and care being taken at every stage from its foundations is apt to collapse if put to any strain.

An examination of the Board of Control's Report for 1924 shows that 60% of mental hospitals possess laboratories (more than half having trained assistants and 14 resident pathologists), 26 hospitals have X-ray departments or arrangements for such work to be carried out, over 46 have clinical rooms, 78 dental rooms, and 46 operating theatres. The position generally is also improving in regard to the appointment of dentists and visiting specialists. It would appear, then, that the foundations for team work are already being laid in many of the public mental hospitals—so much so that in all the larger hospitals it should not be a difficult matter to complete the structure on the lines I have just suggested.

Let me make sure that I have made myself clear as to what I mean by team work. Good clinical work in plenty is already done, usually by individual medical officers on individual cases. Now this is satisfactory as far as it goes, but it is not enough. My view is that the problems which present themselves in any given case cannot be solved effectively in this way, but that they each demand separate consideration by one who has made a special study of them. Certain examinations should be undertaken in every case, and others as the chief of the clinical team may direct. In this way a clinical dossier of each case is compiled, to which all the medical officers and the specialist concerned have contributed. This dossier is carefully studied by the clinical head, and the nature of the morbid mental and physical processes arrived at as far as they are ascertainable. The patient is then temporarily categorized, lines of treatment are indicated and, according as to what is thought advisable, the case retained for continued examination or handed over to a medical officer for the necessary treatment. The case is subsequently reviewed from time to time by the team, as occasion requires, until the question of its disposal arises—when it is re-examined and reviewed and a final decision is arrived at.

It is obvious that no settled plan to bring this about can be devised to suit all public mental hospitals, differing as they do as regards their location, ratio of medical staff to patients, number and character of patients, etc. I can only, therefore, make some suggestions which may be helpful.

The ideal is, I think, to utilize to the uttermost for this purpose the present staff of medical officers and to link them up with such specialists as the circumstances of each mental hospital demand.

Proceeding along these lines the team in the larger mental hospitals would require two "heads" or "chiefs," one for male and one for female patients—as a rule the two senior medical officers.

I rather favour the use of the term "clinical directors" in this connection, which is very significant of their prinicipal function. Each of the other medical officers would be required to make, as might be necessary, one or more branches of medicine besides clinical psychology a special study. No doubt the leanings and aptitude of individual medical officers would be considered in making this selection of subjects. He would require to read up very thoroughly the subject or subjects in which he is to specialize, and probably need some special clinical instruction (to obtain which study-leave should be granted) and he would work, as far as these special branches are concerned, under the direction of the appropriate visiting specialist, subject, of course, to the clinical director. I have not the slightest doubt that very soon such a medical officer would be amply qualified to deal with ordinary cases in regard to the particular aspects he has elected to study. His work would be checked by the specialist on his periodic visits, and the latter would ordinarily concentrate his attention on unusual cases.

This arrangement of medical work would also operate to the benefit of the medical staff. Medical officers would find their duties more interesting, and would have an opportunity of keeping more abreast of the progress made in other branches of medicine and be better equipped for general practice, etc., should they decide later to sever their connection with psychiatry.

SPECIAL SECTIONS OF TEAM WORK.

Now as regards some of the special sections of team work. For laboratory findings a resident pathologist in larger hospitals is ideal, but in any case there would be an amount of clinico-pathological work to be done by the medical officers individually.

The service of a skilled laboratory assistant is very desirable. Experience shows that an X-ray installation serves many useful purposes in a mental hospital, which I need not detail here. Any intelligent lay officer can readily be trained as an assistant X-ray operator, and thus reducing the medical man's routine work to a minimum. A few attendances at an X-ray department of a general hospital suffice to give the medical officer a good working knowledge of the use of the apparatus, and experience soon supplies the

rest. In regard to both clinico-pathological and X-ray reports, even the small mental hospital can do something. For the former there are now many agencies in addition to general hospitals which would report on specimens sent—as in the case of nursing home and cottage hospitals, which enter into contracts for this purpose. The number of independent, practising X-ray operators, both medical and lay, is increasing, and for a fee they will attend anywhere, taking with them their own appliances. Each hospital would settle for itself the number and character of specialists and consultants—the most essential, I think, being a dentist, an ear, throat and nose specialist, a neurologist and a gynæcologist. As I have stated before, it is best to proceed slowly, so that each new departure can be assimilated and incorporated in the daily routine and thus consolidated, before venturing further afield.

For the purpose of securing that all examinations and reports shall have a degree of comprehensiveness and uniformity, and to reduce clerical work to a minimum, a set of forms appropriate to the various aspects of the work should be used. (1) For the preliminary physical survey there should be one of a general character for the physical state, much on the same lines as that of the present case-taking sheet, and another for the mental state—the remainder being of the nature of special appendices.

So far I have dealt mainly with the advantages to be gained from team work, and have made suggestions as to how it can best be brought about in public mental hospitals, having due regard to economy and present established practices. With your permission I will now very briefly touch upon some points relating to team work in actual practice.

I think it important that until the physical examination is well on its way to completion the patient should be asked as few questions as possible in regard to his mental state. The main effort of the team should first be concentrated on the ascertainment of morbid physical processes at work and their alleviation. The psychic examination in the meantime should be purely objective, i.e., limited to observation and recording of behaviour. If the case be a certified one this will, as a rule, be sufficient to meet the requirements of the law on the seventh day; if not, the mind should be probed only to the extent of ascertaining whether the patient is insane in a legal sense or not.

This attitude to a newly-admitted case is all-important. As regards the patient, if he is able, as many of them are, to appreciate his surroundings—indeed, some are very sensitive to them—it helps

⁽¹⁾ Copies may be seen on application to the Medical Superintendent of Horton Mental Hospital, Epsom, Surrey.

to dissipate any preconceived erroneous notions (and they are common) he may have regarding mental hospital treatment, and favours the establishment of those relationships which obtain everywhere else in medical practice between doctor and patient. The fact that he is in a hospital for treatment is thus impressed upon him from the first.

It is also to the psychiatrist's advantage, for until that mental upset—either natural to the patient's removal from home surroundings, or the outcome of some common bodily illness such as constipation, digestive trouble, exhaustion, inanition, etc.—has had time to settle down, and the patient's goodwill and confidence is gained, any serious psychical examination other than external may lead to wrong assumptions as to the real nature of the case. Rest in bed, plenty of sleep and any necessary physical treatment should be allowed to have their effect before the psychic examination is advanced further. I regard the psyche in these cases as I would a sore place inflamed and tender to the touch—a mixed infection, one basic, the other merely septic—and I naturally reduce handling to a minimum until I have subdued the inflammation and eased the pain. I can then see better what really is the matter and proceed accordingly.

I am confident much harm is done in these cases by harrying them with questions at a too early stage—thereby often rousing their resentment when we desire their confidence, and otherwise upsetting and disturbing them. Patients who arrive quiet, subdued and amenable, perhaps suffering mainly from a psycho-neurosis, often develop an acute psychosis 5 to 14 days after admission. May this not be due sometimes to the over-zealous psychiatrist submitting them to a too searching mental analysis?

The examination then proceeds according to plan.

The case is first examined by the head of the team, who fills in the general physical report, notes such aspects as he thinks call for deeper research and notifies the appropriate specialist accordingly. Opinions will differ as to what special examinations should be undertaken in every case. Psychiatric experience would suggest certainly a dental examination, a blood-count, a blood-sugar estimate, a blood Wassermann, a comprehensive urine examination, a bacteriological examination, a lower bowel wash-out, and, when possible, a test-meal for acidity.

General or focal infections should invariably be sought for and if adequately demonstrated, eradicated at the earliest possible date. Of all physical disorders they may have the profoundest effect, and are often inimical to mental treatment and recovery.

Now, before any serious attempt is made to gauge the nature

and extent of the psychic trouble, the complete history—family, personal, present illness—of the case must if possible be ascertained. Too much stress cannot be laid on this point. It is the basic fact of modern clinical psychiatry. It is the only sound basis upon which to build up the case, and connotes that biological approach to emphasize which is the main purport of my address.

To commence from symptomatology yields merely the old and inept descriptive conception upon which only empirical treatment can follow—a mere gamble. This, of course, is without prejudice to the relief of morbid physical states, which it goes without saying is undertaken forthwith.

It is the dynamic conception following on the biological approach which is the only true guide to treatment, which is strengthened by the indications furnished by the mental and physical examination.

"It is not to be imagined that he should know the remedies of disease who knows not their cause."—Celsus.

To obtain this history it is absolutely essential to have the assistance of a psychiatric field worker or hospital visitor who at the earliest possible date visits the patient's ordinary place of residence and interviews either there or elsewhere all who appear likely to shed any light upon the case. From these environmental reports is obtained information of a wide character and of the utmost importance.

HOSPITAL VISITOR'S REPORT. Visitor's General Observations.

1. Environment. 2. Personal particulars, such as pursuits, manner of life, habits, family relationships, recreations, etc. 3. Cause of breakdown, especially earliest date of any change in temperament and in attitude to relatives and family or neighbours. 4. Habits as regards alcohol, work, etc. 5. Any gleanings of instability or alcohol in the ancestry, etc. 6. Any previous mental breakdowns, with dates and mental hospital. 7. Patient's behaviour at home from onset to being taken away. 8. Any general observations which may be helpful to the doctor and nurses.

The environmental report is supplementary and corrective to the account given by the relatives on their first visit, which should be not later than a week after the admission of the patient. It is often difficult to be sure at these interviews that one has really arrived at the truth. In some cases the friends are obviously sincere and desirous of giving the medical officer all the information in their power; but this is by no means always so. Insanity in the family, previous attacks, etc., are not uncommonly concealed for the not altogether inexcusable reason that the revelation of such facts might result in the case being considered as a serious one and thereby might add to the length of the patient's detention. A factor often

concealed is the relatives' own participation in the cause. It is the attitude of the wife to the husband, or that of the husband to the wife, or the attitude of either to the children, or vice versâ, etc., which is often the determining factor in the mental breakdown, and naturally the husband, for instance, is eager to lay the blame on anybody except himself. It is particularly such facts as these that a discreet and discerning field worker can glean by visits to the patient's home. The definite ascertainment of the circumstances which led to the patient being put under care and control is also important from a legal point of view.

Fortified by a complete history of the patient and a knowledge of his physical state and his behaviour since admission, a favourable moment is sought to complete the psychical examination. In the meantime all urgent symptoms are being met by appropriate measures.

Now the disordered mind can be approached from several directions, and the observations necessary for a complete survey may conveniently be grouped as follows:

1. Objective observations (disorders of conduct).

GENERAL ATTITUDE AND EXPRESSION: Vacant, dull, anxious, terrified,

friendly, elated, hostile, impertinent.

GENERAL PSYCHO-MOTOR DISTURBANCES: Talkative, noisy, singing, resisting, laughing, whistling, banging, gesticulating; lachrymation, groaning, wringing of hands, disordering hair, etc. Restless, picking, fraying, undressing, etc. Wandering, trying doors and windows. Silent, anergic, apathetic, unemployed, needing to be washed and dressed.

VOLITIONAL DISTURBANCES: Distractability, inattention, catalepsy, echolalia, echopraxia, automatism, active and passive negativism (rigidity, resistiveness, mutism, refusal of food, retention of saliva, urine, faces, etc.), stereotypy, mannerisms. Morbid impulses (homicide, suicide, self-mutilation, kleptomania, pyromania, dipsomania, masturbation, exposure of person, hiding away, escape, hoarding rubbish).

ECCENTRIC CONDUCT: Mimicry, theatrical attitudes, fantasies of dress, eccentricities of speech and handwriting, use of high-sounding and unusual words, neologisms.

OTHER ABNORMAL CONDUCT, especially relating to delusions, illusions and hallucinations.

2. Subjective observations (analysis of mind).

DISTURBANCES OF THOUGHT: Clouding of consciousness (stupor, dream states, coma); loss of apprehension (failure to note environment); disorientation (time, place, person); imperception, hallucinations (special senses, organic, kinæsthetic, reflex); illusions (sense deceptions, mistakes of identity); loss or dullness of comprehension; paralysis, retardation, acceleration, circumstantiality, confusion, incoherence (flights of ideas) of thought; memory disorders (deficient for recent or remote events, falsification, fabrication); deficiency or perversion of imagination, association, reasoning and judgment (irrationality, loss of insight, misinterpretation, confabulation).

MORBID CONTENTS OF MIND: Fixed ideas (hyper-quantivalent, autochthonous and obsessive ideas); delusions, unsystematized or systematized, unworthiness, apprehensive, visceral, negation, pride, wealth, grandeur, suspicion, persecution, unseen agency, love, jealousy, hypochondriasis, religion: inaccessibility.

MORBID EMOTIONAL REACTIONS AND DESIRES: Euphoria, hiliarity, pride, domination; chagrin, anger, rage, fury; gloom, sorrow, anguish; anxiety,

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fear, terror; regret, shame, remorse; despair; humility, helplessness; loneliness, nostalgia; strangeness, wonder, mystery; jealousy, suspicion. Morbid desires, aversions, doubts, fears (misophobia, agaraphobia, etc.), morbid shyness. Emotional reaction dulled or deficient; instability; irritability.

Character observations.

EDUCATION: Reading, writing, arithmetic—deficient or nil; general knowledge—unbalanced, deficient, poor.

INTELLIGENCE: Low grade, poor, childish, regression.

VOLITION: Weak, easily influenced, dependent on others, a spendthrift, ambulatory and migratory habits, pauperism, unemployed.

DISPOSITION: Aggressive, ambitious, timid, shy, miserly, sexual, cunning, treacherous, proud, boastful, suspicious, cruel.

TEMPER: Fickle, fiery, impulsive.

TEMPERAMENT: Buoyant, depressive, unstable, sluggish; introvert, extrovert.

SENTIMENTS: No self-respect, no capacity for friendship, morbid contempt and hatred, loss of family affection, loss of manners and courtesy.

MORALITY: Anti-social, untruthful, dishonest, criminal, deficient sense of right and wrong, deficient sense of propriety.

4. Observations regarding associated nervous and physical states.

Insomnia, anorexia, dyspepsia, constipation, palpitation, morbid sensations referred to the heart and abdomen, paræsthesias, sweatings, headache, tremblings, vertiginous attacks, fatigue, neuralgias, hysterical seizures (describe), epileptic seizures (describe).

5. Mental tests and the determination of submerged complexes (in suitable cases).

Reaction time, span of memory, memory test, etc.

ANALYSIS: Free association, time association, dream analysis, hypnotic analysis.

6. General survey.

Patient's own account of illness. Summary of factors revealed by a study of the family and personal history which seem to have undermined patient's mental health. Probable exciting cause—physical (toxæmia, etc.), mental. Discussion of symptomatology and development of the psychosis—successive phases. Regression. Genesis of delusions and hallucinations.

PSYCHO-ANALYSIS: The complex, conflict, rationalization, sublimation, inversion, displacement, conversion, repression, projection, phantasy, dissociation, altered personality, etc.

Examinations grouped on some such plan as this afford a fine opportunity for team work. Obviously the completion of the general survey, which, together with the physical reports, would lead up to a diagnosis and the assembling of lines of treatment, would be the duty of the clinical director. The other reports would be made by those of the team best fitted by experience and training for the purpose. Nos. 1, 2 and 4 fall conveniently together, and likewise Nos. 3 and 5, and the examinations should be in this order.

The objective observations commence from the moment the

patient enters hospital, and the medical officer making the report, in addition to recording his own observations, collects the observations of all who have been in contact with the patient. For some of the particulars he may have to avail himself of the history notes of the case. This report as descriptive of the mental state on admission can usually be completed by the end of the first week or ten days.

In many cases the subjective observations can be proceeded with at an early date and pari passu with the objective report, but it is useless to attempt to complete this report in the presence of great psycho-motor excitement or other mental states which render the patient inaccessible. It should, however, invariably be completed sooner or later and, if delayed, dated. Under the system of case-taking at present generally carried out by one medical officer and completed by him before the end of the seventh day this searching of the inner mind may, for the reasons I have already stated, be omitted entirely, and the patient may leave hospital or slip into chronicity without any proper record being made of the introspective aspect of the case.

A word or two as to the way in which this subjective examination should be conducted.

Due regard should always be paid to the possible bad effect on certain patients of close questioning of an intimate character, and the examination should be modified accordingly or postponed until an occasion less fraught with danger to the patient presents itself. Conditions being favourable in every respect, the patient should first be encouraged to talk and to tell his story in his own way. interrupting him as little as possible. Judicious questioning of a not too pointed character should follow. It is fatal to the truth if the patient acquires the impression that the object of the medical officer's questions is to ascertain whether he (the patient) is sane or not. The medical officer should show a warm interest in the patient's welfare, and make it quite clear that his main purpose is to help him to solve his difficulties. The strictly impersonal or detached attitude is a mistake and, though it is necessary for the medical officer to keep calm and collected, he must at the same time show kindness, sympathy and tact if the patient is to respond satisfactorily.

To be able to apprize the personal character of a patient correctly requires a special bent of mind not possessed by everyone. It is always difficult to repress one's instinctive feelings of liking or disliking so as to arrive at a true estimate of the worth of others. Yet this must be done if the character report is to be of any practical value. Much depends upon the care and accuracy with which the

history has been taken, also upon its source (1). These facts of history must be carefully sifted and weighed in the light of the facts revealed by examination. The nature of educational handicaps must be ascertained, also the extent of any congenital mental defect. It may be necessary to define the intellectual quotient of the patient by means of one or other of the standard tests, such as the Stanford-Binet or the Binet-Simon.

The mental tests, perhaps the only instruments of precision a psychiatrist has at his command, should be undertaken in all cases which permit of them. Their chief value lies in the fact that when repeated from time to time during the course of the case and compared, they are a definite indication as to the progress or otherwise which is being made.

As to psycho-analysis and psychological analysis (Jung), although the applicability of these methods of psychical investigation is much limited in the psychoses when well established, there can be no doubt as to their value in early and convalescent stages and in cases of the neuroses and psycho-neuroses. They are particularly indicated in those psychotic cases which arrive at a certain stage of convalescence and seem to make no further progress, and in those cases which either show an overwhelming desire to return home, or are reluctant to face the world again. These patients should be searched for psychic traumas and repressed complexes, etc.

Both in regard to the ascertaining of the character of the patient and his normal reaction to environment and the application of mental test and psycho-analysis there is ample scope for specialization. Thus a psychiatrical team cannot consider itself complete without the inclusion of clinical psychologists who are well versed in experimental psychology, in psycho-analysis, and in mental deficiency.

The recognition of the important parts played by the vegetative nervous and endocrine systems in mental life—especially the purposes they subserve in regard to instinctive action, desire, affective state and emotion—demands for their consideration a special place in psychiatrical team work. It may be said truly that the great diversity in temperamental qualities and physical characteristics peculiar to each individual can be accounted for by diversities in functional vegetative nervous and endocrine "make-up." They are the keynote of the organic processes of growth and metabolism. It is also an undoubted fact that upon the healthy functioning of

^{(1) &}quot;I am sure of this: that as the justly successful members of our profession grow older and probably wiser, they more and more guide themselves by the study of their patients' constitution, learning more of family histories, and detecting constitutional diseases more skilfully in signs which to others seem trivial."

these structures depends in a great measure our effectiveness and happiness, and nothing, I think, in recent years has so profoundly affected our knowledge of the physiology of the nervous system, of the dynamics of mind, as the discoveries made in regard to the vegetative nervous system and endocrine functions. This has been reflected in the spheres of pathology and, especially, psychopathology (1).

For years our attentions were mainly devoted to the anatomy and physiology of the somatic or sensori-motor system. The sympathetic nervous system had a minor position, and the endocrines were largely unknown territory. All this has been changed, thanks to the devoted work of Pavlov, Cannon, Gaskell, Muller, Eppinger, Hess, Higier, Jacobsohn, Langley, Spiegel, Langdon Brown, Collin, Allen, Doisy and many others, and the valuable contributions of my predecessor, Sir F. W. Mott, are within the recollections of all of you.

Although the division of the nervous system into vegetative and sensori-motor is artificial anatomically, functionally the two divisions are best considered as serving different ends and, although there is much yet remaining to be revealed in regard to the modes of operation of the vegetative endocrine combination both in health and disease, we know sufficient to be able to say that an intimate knowledge of them is essential to the clinical neurologist and psychiatrist.

We know that the vegetative nervous system, because phylogenetically the older system, has the dominating position in regard to the nutrition and preservation of the body. It has to do with the desires, feelings and emotions and the functioning of the primary instincts generally. On the other hand, the function of the more highly differentiated sensori-motor system is the bio-mechanism through which these bodily needs are satisfied, the higher functional levels being concerned mainly with the adjustment of the relationships of the individual with the outer world. Aristotle divided the functions of the living into two groups—(I) conservation and (2) relation with the outer world; and Bichat associated the first with the sympathetic system and the latter with the cerebro-spinal system.

The vegetative nervous system retains the metameric ganglionic grouping of the primitive nervous system and, in addition to primary metameres it has centres in the spinal cord, brain-stem, cerebral ganglia, and almost certainly in the cerebral cortex. This segmental grouping shows itself in the functioning of the system,

⁽¹⁾ One of the first to draw particular attention to the important part played by the sympathetic nervous system in emotional disorders was William Murray, M.D.Lond., in a book named A Treatise on Emotional Disorders of the Sympathetic Nervous System of Nerves, Churchill & Sons, 1866, p. 118. He was adversely reviewed in the Journal of Mental Science.

especially in regard to disturbances of the psychic concomitants I have just mentioned, and there is a good deal of truth in Kempf's views in this respect. Hardly a bodily structure or function escapes the activity either directly or indirectly of this system, and it can no longer be denied that mental states are capable of producing both acute and chronic changes in bodily structure; for it is now known that such changes can be effected by the vegetative nervous system acting upon the endocrine glands and the hormone output and balance.

It would seem important therefore that the neurological examination of cases of recent mental disorder should have regard to the possibilities of neuro-glandular disturbances in the light of their possible psychic corollaries, and that special attention should be given to the vegetative nervous and allied functions.

Examination of the Vegetative Nervous and Endocrine Systems.

Morbid Vegetative and Endocrine States and Reactions.

MENTALITY AND NERVOUS SYSTEM: Emotional state, retardation, precosity, deterioration, etc. Referred pains, tremors, convulsions, reflexes, cramps.

HAIR AND SKIN, FACE, STATURE, SKELETAL AND MUSCULAR SYSTEMS: Hypertrichosis, pigmentations, scleroderma, dermatographia, hyperidosis, deformities, dystrophies, goitres, obesity, osteopathies, arthropathies, cretinism, myxcedematous states, etc. X-ray observations, electrical reactions.

HEAD, EYES, NOSE, MOUTH, ETC.: Headache, oculo-cardiac reflex, exophthalmos, cocaine and adrenaline-pupillary tests, etc. Salivary distrubances, deaf mutisms.

HEART AND BLOOD VESSELS, LUNGS: Bradycardia, tachycardia, vasovagal attacks, etc., asthma, Addison, Raynaud, erythromelalgia.

GASTRO-INTESTINAL TRACT: Hyperacidity, achylia, spastic constipation, nervous dyspepsia, visceroptosis, globus, entero-colitis, etc.

GENITO-URINARY: Menstrual disorders, renal colic, incontinence, priapism, etc., abnormal gonadal states.

METABOLISM: Sugar tolerance, variations in fat, etc., basal metabolism (oxygen), etc.

Tests for Vagotonia and Sympatheticotonia.

Effects of subcutaneous injection of pilocarpine 1 c.c. of a 1 % sol.

Skin. Pupils. Heart. Other symptoms. Effects of subcutaneous injection of atropine 1 c.c. of a 1 in 1000 sol.

Skin. Pupils. Heart. Other symptoms.

Effects of subcutaneous injection of adrenalin 1 c.c. of 1 in 1000 sol. Goetsch's symptom, glycosuria.

Endocrine Summary.

THYROID
ADRENAL
PITUITARY
GONADS
THYMUS
PINEAL
Parathyroid

Hyperfunction. Hypofunction. So much, then, for the practical side of team work.

To return to broader issues—I have already said that psychiatrical team work provides a field where fruitful relationships between psychiatry and general medicine and its other branches can be established. It is now apparent that in addition to this, team work, by including in its personnel the various psychiatrical practitioners, will bring about a unity of psychiatry itself which is bound, in the long run, to achieve much progress.

3. Reconstruction of Psychiatry as a Medical Science.

It may have struck those of you who practise psychiatry mainly in public mental hospitals that I am envisaging a psychiatry of a wider description than that which centres in that legal conception of mental disorders-"insanity." This is so, for I trust the time is coming, and that soon, when all mental institutions will be equal before the law-and none at a disadvantage-as to type of patient, the stage the disorder has reached, or the facilities for care and treatment. In other words, like general hospitals, mental hospitals, in regard to their particular sphere of medicine, will, as far as they are able, shelter and attend to the needs of all who apply for or are brought for treatment. The law no doubt will continue to say who shall come or stay unwillingly, and to afford protection when necessary to their worldly goods and possessions. The psychiatry I envisage is one which has broken through its legal bonds and no longer limits itself to the study and treatment of cases of mental disorder flung to it by the law. This latter aspect of psychiatric practice will be a secondary consideration and no doubt as efficiently done as now, but psychiatry will no longer centre in it. I also trust that under the new order of things the necessity for legal interference will be a diminishing factor.

What, then, are the limits, if any, of psychiatry within the sphere of general medicine? This involves a consideration of the relationship of general medicine to psychiatry—the converse of what I have up to now been dealing with—and the relationship between psychiatry and neurology.

GENERAL MEDICINE AND PSYCHIATRY.

Now, to me, it appeared to mark an epoch in medical science when the then President of the Royal College of Physicians of London—Sir Humphry Rolleston—at the inaugural meeting of the National Council for Mental Hygiene in 1922, and again in almost the same words at the annual meeting of the British Medical Association held at Bath in 1925 (I quote the words of the latter occasion), said:

"It must be remembered that probably the bulk of patients in ordinary practice present some disorder, however slight, of mind, conduct, or feeling, spoken of as 'nerves,' neurasthenia, night terrors, and that in this early stage of conditions responsible for such an enormous amount of distress proper treatment is most successful. Failure to deal efficiently and sympathetically with these minor disorders, which no doubt depends on the very scanty instruction available in the medical schools on this subject, may well, as Dr. Lewellyn Barker (1925) has pointed out, account for some of the vogue of Christian Science and other forms of irregular practice. The public, as well as ourselves, require education as to the way in which mental abnormalities should be regarded, and should be impressed with the similarity of mental and bodily disorders, and with the commonplace that prevention is better and cheaper than cure, so that the earliest departures from the normal should at once be communicated to the doctor and remedial measures started without delay, this step eventually becoming as much a matter of course as a visit to the dentist. The enormous economic benefit to the country of such preventive treatment needs no insistence.'

This frank acknowledgment of the enormous importance to the community of psychological medicine, though a fact long recognized, and, coming from such a source and at such a time, seemed to me to foretell the death of law-shackled psychiatry, and the birth of a new psychiatry at liberty to control its own destinies and to function freely according to its own standards as any other branch of medical science. The general body of the profession were at last awakening to the fact that psychiatry belongs to general medicine. There can be no shadow of doubt as to this relationship and its significance, and the more thorough realization of it is of prime importance to the mentally affected.

As long ago as the early part of the seventeenth century it was laid down by Franciscus Sylvius (1614-1672) that—

"Whoever is unable to treat the diseases of the mind is no physician."

It will be profitable, therefore, to spend a few moments in examining this relationship, which I have already touched upon in a historical sense.

Every patient suffering from a physical complaint brings to the doctor also a mental attitude. He relates mental experiences such as pain, shortness of breath, sleeplessness, failure of some special sense, loss of appetite, feelings of weakness, anxiety, apprehension, etc. These mental attitudes or states of mind the doctor analyses, and seeks for the physical disorders of which they are the expression. If he fails in this or is satisfied that there is no actual bodily disease he then thinks of mere disorders of function, and it is only when such appears to be absent or much exaggerated that he turns his attention to the patient's mind. Nevertheless he has from the first been dealing with the mental state as well as the physical state. How much clearer his vision of the case would be were he all along to be conscious of this and able to view his patient not so much as a physical mechanism out of order, but as primarily a thinking and

feeling being, an individual and not merely a case. An analysis of cases admitted to a mental hospital shows that a great number of the patients first sought relief from private practitioners or general hospitals for mental disorders which were clothed in the garb of physical disease. It is to be deplored that in the majority of cases this was not recognized until too late, which might have been largely avoided had the physician reflected there was a mental side to every illness—even, as White puts it, "to a sore finger." This mental attitude of the patient to his real or fancied bodily disorder is deserving of a little closer analysis.

In healthy people the psycho-physical energy flows outwardly, finding interest and pleasure in the external world of reality, and with it there is an acute sense of being alive, of strength, vigour and effectivity. A failure, however, of the physical mechanism, whether it involves ascertainable organic disease or not, changes the outlook. The direction of the flow of psycho-physical energy in these circumstances is altered, wholly or partly, and some of it at least is withdrawn from the outside world and directed towards his bodily processes. The invalid feels ill in some way, he loses his sense of security and well-being, there arises a sense of inferiority, and he becomes uncertain, apprehensive and dependent on others. This attitude to his illness varies with the severity of his symptoms and constitutional "make-up." He may in some cases be calm, collected and reasonable, leaving to others the analysis of his symptoms and the diagnosis of his disorder, but often on the other hand his over-anxiety and increased self-suggestibility and fear lead him to locate his disease in some unoffending organ. He may take a grave view of his illness, and arrive at the doctor's house almost distraught with anxiety and fear.

Now the physician depends a good deal on the patient's statements or mental attitude for his information, and the patient's feelings and sensations may have a profound effect on diagnosis. Furthermore, emotional states such as dread, fear of possible operation, of going into hospital, or of loss of employment, etc., have bodily effects which may prove a confusing factor in arriving at the true facts of the bodily derangement. To these must be added the effects of the patient's eccentricities, prejudices, ignorances and even superstitions.

The late Sir W. T. Gairdner, in his Presidential Address, 1882, said that "Disease is, for the most part, normal function acting under abnormal conditions." By this he meant that normal function is still present, but struggling to assert itself even in the midst of severe disorder caused by disease, and that we have come to aim at treating not so much the disease

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as the man, assisting, sustaining and supporting all that is sound in him to overcome that which is unsound. How true this is, especially of the minor illnesses and complaints addressed to the general practitioner! How many of his patients present almost physically sound bodies, trying to function normally, but handicapped by the subtle influences of unfavourable physical, social and moral environment, and how well the body responds and returns to healthiness when the latter are removed, often at the instance of the doctor!

What a wealth of psychiatric practice there is in general medicine! Here are the roots of the science and art of the psychiatry I envisage, which should not commence at the breaking-point of the mind commonly known as the psychoses. On the contrary, it should commence with those mental failures and deficiencies associated with everyday stress and trials, with the observations and experiences of the physician in the world of affairs, in the home, in the schools, in the workshops, in the consulting-room and the outpatient department and wards of the general hospital.

Psychiatry, then, is primarily an integrant of general medicine, and receives from it a commission to take up the special study and treatment of mental disorders and deficiencies. In close relationship to general medicine the physician deals with disordered mental function associated with a variety of morbid physical states, as, for example, the pain, anxiety and mental fatigue of all acute illnesses, the delirium of fevers, the mental confusion of uræmia, acute alcoholism and toxæmias, the gloom and irritability of alimentary disturbances, the spes phthisica, the coma of diabetes, the hebitude of myxædema, etc. Specializing a little more, and now known as the neurologist, he is confronted with morbid mental corollaries often associated with epilepsy, chorea, encephalitis lethargica, paralysis agitans, cerebral arterio-sclerosis, tabes, chronic alcoholism and other organic and toxic nervous diseases.

Becoming more exclusive, psychiatry now disputes territory with the neurologist in respect of a group of mental disturbances variously classified as the neuroses, psycho-neuroses and psychoses, such as neurasthenia, compulsion neuroses or psychasthenia, hysteria, anxiety neurosis, Graves's disease, etc., also the so-called borderland mental cases or the incipient psychoses.

Psychiatry, then, without opposition takes over and occupies a territory which has commonly been held to be outside and alien to general medicine. Many still think that psychiatry begins and ends in this land of fools and madmen in which the so-called alienist physician is supreme governor. General medicine shrank from it until recently, just as psychiatry held itself aloof from general

medicine. The physicians in charge of asylums and mental hospitals who followed those early pioneers of 1793 to 1835 whom I have mentioned—a period which saw the renaissance of psychiatry as a branch of medicine—felt this attitude to be necessary. Their reasons for this are fully set forth in the first number of the Asylum Fournal. One quotation is sufficiently illuminative on this point:

"The necessity of such exclusive devotion to the study of insanity, of such a second education, would by itself of necessity constitute diseases of the mind into a strict speciality: and it would be difficult to instance any physician who has ever become celebrated in the treatment of mental disease, or has written any work of standard authority thereon, who has not previously separated himself from the wide field of general medicine."

That the necessity had arisen for the calling of another branch of medicine into active existence cannot be questioned, and all honour is due to those who accomplished it. The pity of it is that they elected that it should grow up outside and not inside the fold of general medicine. That fault, as I have said, it is our duty to remedy. As an actual fact this specialist territory is still well within the confines of general medicine, for, in a sense, many cases of psychoses (those known as the true psychosis) return to general medicine because of the grave implication—either cause or effect—of marked physical disturbance and disease.

It may seem paradoxical, but many of those mental disorders which have mostly given rise to psychiatry as a strict specialty because they necessitate restriction of the individual's liberty are closer to general medicine than the neuroses and psycho-neuroses, and the psychiatric attitude to them is largely an affectation in the present state of our knowledge—the real attitude being that instead of the general physician engaged in treating bodily disorder or disease.

Nowhere has my conception of psychiatry lost touch with general medicine and, at this final level more than at any other, is it dependent upon the latter for its vitality and effectivity. The issues are so momentous, the problems so baffling, the territory so unexplored, that psychiatry as a specialty needs all the aid that can be given by medical science and all its branches.

The practice of psychiatry is not limited to mental specialists as is commonly thought. Such a narrow view can no longer be justified. The psychiatry I envisage covers that practised by the general practitioner, the neurologist and the mental specialist, to which must be added that of the ear, nose and throat and other specialists and the dentist.

Psychiatry has not one but several fields. There is firstly that which for long has been looked forward to and has the approval of the Association, namely, the psychiatric clinic of a general hospital, which Colonel Goodall has pictured as "a bright particular

star" and which would be "the centre of a constellation from which would radiate beams to lighten up all the dark places of psychiatry."

I suggest a second, not one on the horizon or still on the knees of the Gods, or conceived in the womb of Time and yet to be born, but one already existing, may-be a dark place needing illumination, but a field which I suggest will well repay cultivation. I mean our public mental hospitals. The development of team work in these institutions is just as necessary in my opinion as it is in special mental clinics. Here is a place at hand, one which needs no creating, for that union of endeavours, that meeting-place of medical science, for the cure of mental disorders. I cannot paint the picture in the roseate hues effected by Colonel Goodall. But there is this fact: We know the worst of the mental hospitals and have a shrewd idea as to what is practicable there. In regard to this country the application of the general hospital clinic system is yet to be tried, and these roseate hues have to face the weather. With Colonel Goodall we foresee great achievements for the clinic, but even then every field of psychiatry will not have been covered, or the heavy burden of occurring mental disorders diminished for the community.

There is still another field, maybe the last to be cultivated, but one rich in potentialities, and one which will become the brightest star of all in the psychiatric firmament, and that is the field of general practice. Here the roots of the evil will be located and eradicated and its growth to maturity prevented by methods of prophylaxis. Every general practitioner will then be a psychiatrist, for in every community both great and small there is need for the practice of psychiatry, especially in regard to the child-life, the character-training of adolescents and the better industrial efficiency of adults, let alone the prevention of crime and other anti-social behaviour with their attendant misery and destitution.

To build up this wider psychiatry which has its roots in general practice there is urgent necessity for more mental clinics in connecting with the medical schools for teaching purposes, and the next essential is to ensure and maintain a greater efficiency of clinical psychiatry in the mental hospitals. Upon this double basis it may be possible to create an enduring system of mental clinics at the general hospitals and infirmaries to overtake occurring mental disorders in their early stages which the general practitioner cannot deal with in the patients' homes. The mental hospitals will then take up their rightful position as in the case of other special hospitals, *i.e.*, as adjuncts to general hospitals, and work in close relationship with them. As I have already stated (p. 53) the pressing needs at the moment are affiliation and reciprocity between mental

and general hospitals. These are preparatory and educational measures necessary to bring into existence the larger purpose.

PSYCHIATRY AND NEUROLOGY.

A few words now as to the relationship of psychiatry to neurology. Neurology has been defined as "the sum total of knowledge regarding the nervous system and its diseases." According to this definition neurology is a book, of which psychology and psychiatry are merely those chapters devoted to the activities at the psychic (or symbolic) functional level of the nervous system.

Those, however, who look upon man as a psycho-biological unit, inconceivable apart from his environment and his reactions thereto together with his constant striving towards some goal or other, would not agree with this appropriation of psychology and psychiatry by neurology. In their view the psychic functions reign supreme and control the comings and goings of the nervous system and, through it, the whole organism—neurology thus being a science subsidiary to psychology and psychiatry.

But however neurology is defined, there can be no doubt as to its close relationship to psychiatry; indeed between them there is no sharp dividing line, especially in practice, for psychiatry and neurology now afford each other constant help and enlightenment, which broadens their outlook, so much that they have become interdependent.

Griesinger in 1866 said:

"I believe that the time will arrive when only those will be true specialists in psychiatry who survey the whole domain of nervous disease, and cultivate it as widely as possible." (Journ. Ment. Sci., 1867, lx, p. 475.)

In 1926 we find Grainger Stewart writing:

"There can be no doubt that in the past the tendency to separate neurology from psychiatry has done much to hinder the progress of both these branches of medicine, and it is a welcome sign of the times to see that the trend of modern opinion is to bring them closer together." (Foreword, Monrad Krohn's Clin. Exam. New Syst., 1926.)

Neither psychiatry nor neurology can afford to ignore each other in their conceptions and treatment of the disorders and diseases referred to them by general medicine.

As to the extent psychiatrists have been helpful to neurologists it is not for me to say, but the incursion of neurologists into the sphere of psychiatry has been most illuminating and of fundamental value. Witness the works of Hughlings Jackson and his disciple Henry Head, and of Buzzard, Bramwell, Grainger Stewart, of Fischer, Kraft-Ebing, Charcot, Janet, K. Mayer, Hock and many others at home and abroad.

Head sums up the position of the neurologist when he says that "we work in the passage-way between the physical universe and the dwelling-place of the mind."

The observations and conceptions of Head and Rivers are deserving of the closest study by all students of psychiatry and their brilliant work should be followed up, for I am persuaded it was in the direction most likely to fill in the many gaps still existing in our knowledge of the physiology of the nervous system and its relationship to both unconscious and conscious processes of the mind.

Head's careful researches in regard to aphasia warn us not to confuse the physical machinery of the psycho-sensori-motor functions, which distinguish man from other mammals, with understanding and intelligence. He teaches us that before the final process of consciousness is reached, physical stimuli are subjected to three processes, namely, acceptance by similarity, rejection by difference, and bipolar disposition. He declares that we have no right to speak of "psycho-physical parallelism," but should speak of "physiologico-physical responses" and "psycho-physiological relation," and that, as regards disease, the form it assumes is determined by the site of the destruction and its course by the natural history of the disease process.

CONCLUSION.

Medicine, ever the stumbling-block to the Cartesian doctrinaire, has preserved the ontological tie between mind and body because of the peculiar teleological phenomena with which it deals. Medicine holds fast to objective investigations whenever possible, and, in addition, tries to get to the root of things by comparative and genetic methods; and although the physician in his student days acquires materialistic leanings from his saturation in the natural sciences, he finds by experience that there are elements in human nature beyond objective examination, and to which he has to give heed if his efforts to ameliorate or cure diseases are to meet with success. He cannot, therefore, afford to ignore his patient's subjective experiences and is driven to accord a measure of reality to phenomena beyond rigid scientific proof. To this extent he has to overcome his repugnance to speculative methods and to exercise his imagination—which leads him to theorize and unconsciously to transcend experience. Materialism and mechanical explanations, as his experience grows, begin to lose their solidarity for himthough he is seldom driven to pure idealism, but halts by the way at some intermediate school of philosophy.

How much better equipped would he be to meet those baffling problems of human character and conduct which he constantly encounters in daily practice were some of that grounding in natural sciences or advanced anatomy and physiology replaced by a sound course of modern psychology, with its many view-points—subjective, objective, phylogenic, ontogenic, industrial, etc.!

In conclusion: If psychiatry is to be a faithful handmaiden in the practice of medicine, it must come free from rigid materialistic, psychological or metaphysical dogmas. It will be useful in so far as it can vitalize its materialism and mechanisms, can give substantiality to its idealism and abstractions, and can return to the common-sense natural realism of Aristotle, from which it would have been better never to have wandered.

St. Thomas Aguinas (1226-1274), who found the wisdom of Aristotle wholesome and acceptable, and who wrote Summa Theologiae, one of the greatest monuments of thought of the Middle Ages, spoke of the essential unity of life and mind and of mind and body in words now being engraven in modern biology—words which should be pondered by every physician and psychiatrist seeking to know the truth of man's being:

"The mind is so much the reality of the animated body, that it is through it that the body exists, that it is a bodily organism and a living faculty."

I started out with the intention of being severely practical. I fear my remarks have been mainly idealistic and philosophical. The road I have chosen to visualize seems pleasant enough in places, but parts look "rough going" and precipitous, with obstacles not a few. The end is not in sight, for the road is long and winding, but there is a clear sky in the distance which gives promise of a brighter future for the wayfarer, and hope of success to crown his efforts. So may it be with psychiatry.