

Part I.—Original Articles.

**THE NINTH MAUDSLEY LECTURE: THE NEW
PSYCHIATRY AND THE INFLUENCES
WHICH ARE FORMING IT.**

Delivered by Sir JOHN MACPHERSON, *C.B.*, M.D., F.R.C.P.E.,
Formerly Commissioner in Lunacy for Scotland, and Professor of Psychiatry in
the University of Sydney, N.S.W. ; Past-President and Hon. Member,
Royal Medico-Psychological Association.

THE PRESENT POSITION OF PSYCHIATRY.

PSYCHIATRY in its literal sense is the medical treatment of mental disorders, which necessarily implies the scientific investigation of the nature and causes of these disorders. Psychiatry is therefore indissolubly linked with the medical and biological sciences, and participates not only in their solidarity, but also in their unrest, for every advance in these sciences intimately affects its outlook. In addition it has undergone—and is still undergoing—vicissitudes peculiar to itself which are unknown in other departments of medicine.

When, towards the close of the eighteenth century, men like Pinel in France and Tuke in this country rescued the insane from barbarous ill-usage, they at the same time liberated human thought from crude and primitive conceptions of insanity. As a consequence a remarkable awakening appeared in the nineteenth century which began with the clinical study of psychiatry. Pritchard in this country and Morel and Falret in France described delusional forms, Calmeil discovered general paralysis, Kahlbaum described katatonia, and Clouston described adolescent insanity. Immense advances were made by anatomists, physiologists and pathologists in the elucidation of the topography, the localization of function, and the minute anatomy of the brain.

THE ADVENT OF PSYCHO-PATHOLOGY.

With the close of the nineteenth century we witness the close of one phase of psychiatry, but not before Kraepelin had, by his invaluable contributions, fittingly completed the labours of his predecessors and contemporaries. Working on the bases laid down by Falret, Kahlbaum, Clouston, Magnan and many others, he clarified our views, increased our knowledge and built up a

system of clinical psychiatry, the substance of which will endure whatever changes the future may have in store.

The advent of psycho-pathology marked the commencement of the twentieth century. It came unannounced, for its significance did not at first attract much attention. For many years previously the medical world had been interested in Charcot's studies of hysteria, but it was reserved for one of his pupils, Pierre Janet, to demonstrate that hysteria was a mental disorder, and that its varied phenomena could be interpreted in psychological terms. His well-known definition describes hysteria as a form of mental depression characterized by a contraction of the field of consciousness, and by a tendency to the dissociation from consciousness of those systems of ideas and sensations which constitute personality. Janet's contribution to psychiatry is the concept of dissociation—the basis of the new psychiatry.

In some respects Janet's definition of hysterical dissociation is not regarded as entirely satisfactory, for it implies a "splitting up" of consciousness and of personality. It is highly improbable that either the one or the other can be split up, for the cortical mechanism integrates as a single system, and so far as we know there is no exception to that rule. The vital process which we call consciousness is one thing; the outward expression of that process which we call behaviour is quite another thing. Behaviour may give the appearance of split consciousness because of changes in the integration of cortical processes, and in the same way double personality depends upon different integrations within the cortical mechanism at different times.

Bernard Hart has helpfully described dissociation as an "out of gear" relationship, and he has pointed out that much of the misunderstanding regarding it arises from conceiving it as containing a spatial element, whereas from its nature it can have none. If, therefore, we regard Janet's dissociation as conceptual and non-spatial, as a "changing of gears" and not a "splitting off," we obtain a truer idea of its meaning.

As a working hypothesis, dissociation is applicable to the whole field of morbid, mental and nervous phenomena. It explains equally fixed ideas, obsessions and delusions; the various symptoms of hysteria, morbid changes of personality, and the alternating states of elation and depression which occur in such mental disorders as the manic-depressive syndrome. As a permanent functional process it accounts for the mental condition of some, at least, of the chronic inmates of mental hospitals.

When I was a young assistant medical officer I witnessed, on separate occasions two striking incidents. The patients concerned

were a man and a woman, both for many years resident in the hospital. The man was what is called a chronic maniac—restless and gesticulatory—the woman was a quiet, not very responsive dement. Both contracted pneumonia, and coincident with the rise in the temperature they became mentally changed, adjusted themselves properly to their surroundings, and showed the same appreciation of reality as if they had always lived in it. Unfortunately, and to the great disappointment of all concerned, they both relapsed into their former insane state shortly after the subsidence of the fever.

Dissociation is a comparatively new term, but fifty years ago a similar condition was described by Hughlings Jackson. He taught that all morbid nervous phenomena are due to two factors—a negative factor, consisting of loss of function at a higher level, and a positive factor consisting of over-function at a lower level. This, in different language, is dissociation.

The causes of dissociation resolve themselves into two co-operating groups, which may be termed the *causa causans* group, including the whole series of psychical and physical agencies with which we are familiar, and the *causa sine quâ non* group, which in the present state of our knowledge we can only refer to, generally, as the inherent instability of the cerebral mechanism. The present-day return to the study of diathesis, temperament and constitution may throw more light on this subject, the only serious contribution to which has been Shaw Bolton's researches into the depth of the layers of nerve-cells in various parts of the cortex.

THE FREUDIAN HYPOTHESES.

It is at the point we have now reached—the cause of dissociation—that Freud joined issue with orthodox psychiatry. He maintained that functional dissociation was caused by the conflict of opposing psychological forces, and that the resulting symptoms were due to attempts on the part of the organism to adapt itself to altered conditions. Superficially such a statement, apart from its phraseology, appears compatible with contemporary views. Upon it, however, he proceeded to erect a system of psychology which in a remarkably short period of time has captured, if not the assent, at any rate the attention of the civilized world. From this statement, also, he proceeded to formulate a number of concepts intended to explain the nature of these psychological forces, and the phenomenal facts of conscious processes and behaviour resulting from their activities. The two concepts which have attracted most attention and criticism are those of the “unconscious” and the “sexual libido.”

The Freudian theory and method are more firmly established than some people appear to believe, for they are unassailable by direct argument or dialectic attack. It is useless to attack the substance of the concepts, for the critic is met with the perfectly legitimate answer that they are not phenomenal facts, but conceptual formulæ constructed to explain observed facts, as the atomic theory and the law of gravity explain certain physical phenomena. It is equally futile to cast doubt on the facts observed, for these are only known to the individual psycho-analyst. If we venture to question the validity of the therapy, which is the justification of the system, we find ourselves on delicate ground, for our own therapeutics are, for the most part, empirical and indirect. We may, however, complain that we are deprived of information on the results of this specific method of treatment. In functional nervous and mental disorders the most serious feature is the tendency to relapse. Unless the Freudian method is able to check this tendency—and there is evidence that it does not do so in all cases—it possesses no advantage over the countless other methods which claim to cure individual attacks.

To say that the Freudian hypothesis is embarrassing to psychiatry is no more than the truth; to say that it is supplanting it is to exaggerate. It would be more correct to describe the present position as an *imperium in imperio*. The field of psychiatry is infinitely wider than that covered by the Freudian doctrines, and its relations, with the medical and cognate sciences is too intimate to allow of the possibility of the new psychology superseding it.

If the twentieth century should prove as fertile in discoveries pertaining to the structure and functions of the nervous system as the nineteenth century has been, then assuredly the Freudian system will be absorbed by psychiatry, not, however, without leaving indelible marks upon it.

THE VITAL FUNCTIONS OF THE CORTEX.

We are being constantly reminded that it is the paucity of our knowledge of nervous structure and function which necessitates a psychological interpretation of morbid mental phenomena and a psychological therapeutic for functional nervous maladies. The reminder is irrelevant, for although both psychological interpretation and psycho-therapeutics have a place in psychiatry, they are powerless in furthering some of its chief aims, one of which is the investigation of the physical basis of mental disorders.

At the same time, while it is abundantly evident that such vital phenomena as consciousness and personality depend for their normal expression upon unimpaired cerebral *structure*, it is inconceivable

to some of us that they can result from the synthesis of a series of cerebral states, for, as someone has remarked, "How can a series be aware of itself?"

Maudsley was among the first to recognize this antithesis and to attempt to reconcile it with the physical basis of mental processes. In *Body and Mind*, published nearly sixty years ago, the following passage occurs:

"It is strangely overlooked by many who write on this matter that the brain is not a dead instrument, but a living organ, with functions of a higher kind than those of any other bodily organ, insomuch as its organic nature and structure far surpass that of any other organ. What, then, are those functions if they are not mental? No one thinks it necessary to assume an immaterial liver behind the hepatic structure in order to account for its functions. But so far as the structure of nerve and the complex structure of the cerebral convolutions exceed in dignity the hepatic elements and structure, so far must the material functions of the brain exceed those of the liver."

For these and similar vitalistic opinions Maudsley was pilloried as a materialist; but he was no martyr, for he was not only able to defend himself, but, if need be, to carry the feud into the citadels of his opponents. He was a man in advance of his time—one of the galaxy of intellectuals which adorned the mid-Victorian period.

When we say that the brain is a living organ, we mean not that it is endowed with life as one quality among others, but that it is the material and visible symbol of life. Its physiological and psychical functions are manifestations of life, and its structure is patterned to subserve the performance of these functions. Whether or not we believe with Bergson that life is a cosmic force which, through the evolution of organic matter and of an ascending series of nervous systems, was in search of a form of freedom which it ultimately attained to in the human brain, we must believe that the more elaborate a nervous system is, the more perfect are its psychical reactions.

The cerebral cortex, then, is a vital mechanism, which, in the ordered performance of its functions of formulated expression and purposive action, is as meticulous as the mechanisms which control the cardiac rhythm, the temperature of the body or the amount of sugar in the blood. In virtue of the control which it exercises over lower nervous centres it is capable of adjusting the individual to most of the ordinary situations which arise in human experience. It operates both in time and in space. In time it occupies a hypothetical position between the past and the future, which we call the present. The experiences of the past have so moulded its reactions

that the events of the future conform, more or less, to past experiences and the future is thus implicit in the past. In space it constantly receives sensory impressions and physical influences from its environment. These impressions and influences are the crude pabulum on which it operates, and are necessary for its psychical efficiency.

THE FOUNDATIONS OF AN OBJECTIVE PSYCHOLOGY.

Some recent investigations into disease affecting the higher cortical functions and into the physiology of the cortex have resulted in a probability that mental processes can be approached objectively on the physical plane in the same way as physiological processes are approached. These investigations concern three of the principal cortical functions, namely, the psycho-motor, the psycho-sensory and the psycho-inhibitive.

The psycho-motor and psycho-sensory functions of the cortex are co-extensive and co-operative in the initiation and co-ordination of formulated expression and purposive action. They also form, together, the sphere of acquired experience, as, for example, in the art of writing, which is laboriously acquired, and which depends upon two elements—an ideational element in the form of symbols and a psycho-motor element.

Apraxia, or disorder of purposive action, results from definite organic lesions in the cortex, which separate the psycho-motor function from either the psycho-sensory or the motor (Rolandic) area of the cortex.

Kinnier Wilson defines apraxia as “inability to perform certain movements or movement-complexes, with conservation of motility, sensation and co-ordination.” This definition excludes ordinary motor and sensory paralysis, whether cortical or subcortical, and only includes lesions—organic or functional—which affect the psycho-motor or psycho-sensory areas or their connections. Following Liepmann, from whose researches our knowledge of the subject is largely derived, the forms of apraxia may be classified somewhat as follows :

(1) Motor apraxia, in which there is inability to initiate certain voluntary movements or movement-complexes.

(2) Ideo-motor apraxia, in which there is dissociation of certain ideational elements concerned in action. One of its principal forms is perseveration, in which an action already effected repeats itself whenever another action is intended ; or when an action is endlessly repeated or a posture is continuously maintained without power to inhibit or alter it. We are familiar with these phenomena in the

stereotypies, verbigerations and attitudinizing of the subjects of dementia præcox.

(3) Ideational or amnesic apraxia, in which the subject has lost the memory of certain ideas which precede action. Agnosia, in which there is conservation of sensation with a loss of recognition, is a form of ideational apraxia.

The lesions which cause apraxia are numerous—often so numerous as to obscure localization—yet a sufficient number of cases are on record in which the lesions are so definite as to justify the following conclusions:

In pure motor apraxia the lesions are located (in right-handed people) in the left frontal lobe or in the anterior part of the corpus callosum. In ideo-motor and ideational apraxia the lesions are found in the supra-marginal gyrus or the angular gyrus, or in the association area of the temporal lobe.

What has been said of apraxia applies equally to aphasia, which is apraxia of the speech function. Within the last twenty years Marie and Head have revolutionized earlier conceptions of aphasia. Marie sweeps away, as by one stroke, the views of his predecessors, including Broca and Wernicke. He admits of no distinction between motor and sensory aphasia, denies the existence of centres for visual, auditory, or kinæsthetic word images, or the possibility of word images being stored in the cortex. For him there is but one centre, diffusely localized in the temporo-parietal region, which is a region of intelligence specialized for language—not a centre for sensory images. He insists that aphasia is essentially an intellectual defect, entailing not only defects of speech, but of general intelligence as well.

Head's work is equally drastic. For him also, aphasia is a mental disorder with disturbance not only of the psychical function of speech, but also of general intelligence. In speech, as in other cortical activities, the cortex functions as a whole. Certain visual, auditory and motor centres, formerly regarded as speech centres, are relegated to the position of integrating foci, lesions of which affect not only speech but the whole cerebral autonomy. The terms "aphasia," "agraphia," "alexia," etc., are not clinical entities, but symptom-complexes produced by the dissociation of definite systems of mental processes, which he terms "symbolic thinking" and "expression."

Von Monakow has pointed out the important fact that there are temporary or functional forms of apraxia and of aphasia which arise as follows: The cortex functions by means of its vital energy, which, like the motion of a humming-top, keeps its various positive and negative activities in uniform equilibrium. This vital neural

energy is common to all nervous function—to the cardiac and respiratory centres in the medulla as well as to the cortex. It has been recognized by all the more critical writers on neurology, and Head suggests that the name “vigilance” should be applied to it. Any agency which lowers this vital energy disturbs cortical equilibrium and produces dissociation of various kinds. When, for example, cerebral hæmorrhage occurs, the whole nervous system is affected; a partial restoration of function may occur, but for a variable time intelligence and voluntary control are enfeebled, during which apraxia or aphasia may appear. When, in favourable cases, a new equilibrium is gradually established, these symptoms disappear, unless any structural lesion of an integrating focus causes them to become permanent.

Although the existence of cortical inhibition had, of necessity, to be postulated both in clinical medicine and subjective psychology, Pavlov, through his remarkable experiments on the conditioned reflex, has succeeded in demonstrating it, not as an hypothesis, but in actual operation. We learn from his researches that cortical inhibition (which is physiologically a state of rest) has a tendency to irradiate from its point of initiation, and, in doing so, by a process of induction, to cause excitation in neighbouring areas, which excitation arrests the spread of inhibition. From such a point of view we may visualize the cortex as a mosaic of inhibitory and excitatory areas, within which the dynamic activities of irradiation and induction constantly act and react in endless variety, the one against the other. We also learn the manner in which certain changes in the cortical equilibrium of the dog may result in natural sleep, in a kind of hypnosis or in acute mental perturbation.

Sooner or later, in the course of prolonged experiments, the effect of the conditioned reflex tended to fail, in spite of reinforcement, inhibition spread over the cortex and the animals became drowsy. Sleep also occurred when the time elapsing between the conditioned and the unconditioned reflexes was long delayed, when the stimuli were neutral or monotonous, or when they were strong and frequent. These facts point to the conclusion that cortical inhibition and sleep are one and the same process.

In a small number of dogs, instead of sleep, a hypnotic phase of general cortical inhibition was observed. The animals maintained, indefinitely, an alert but motionless posture, eyes widely open, head up, and limbs extended. On passive movement of a limb it remained in the position in which it was placed and the plantar flexor reflexes assumed the character of contractures.

Pavlov describes the temperament and character of the type of dog developing pathological mental symptoms. An excitable and

an inhibiting type stand at either end of the series, and these types tend to develop symptoms corresponding, respectively, to the maniacal and melancholic phases of the manic-depressive syndrome. Two conditions were found to produce these mental disturbances in predisposed dogs—an unusually acute clashing of excitatory and inhibitory processes and the influence of strong and extraordinary stimuli. In one dog the precipitating cause of a crisis appears to have been the attempt to discriminate a luminous circle, used as a signal for the administration of food, from frequently recurring and frequently altered elliptical modifications of this circle.

Among the results of Pavlov's experiments, the only points which specially concern us here are the hypnotic symptoms which are clearly allied to hysteria, and the pathological mental perturbations which resemble phases of the manic-depressive syndrome.

Hysteria is a functional form of apraxia exhibiting, like the latter, such symptom-complexes as agnosia, perseveration and incapacity for retaining impressions. Its cardinal clinical symptoms are amnesia, psycho-sensory and psycho-motor disorders. Amnesia, however unobtrusive, is always present, and is invariably accompanied by anæsthesia in one or other of its varied and intermittent forms, and in the same manner by contraction of the visual fields.

It is important to remember that these symptoms are never absolute, for sensation is present in the anæsthetic limb though not subjectively realized; contractures relax during sleep, and notwithstanding extreme contraction of the fields of vision, the patients are able to avoid accidental collision with objects in their surroundings.

These paradoxical phenomena obviously point to inhibition of function in the psycho-sensory and psycho-motor centres with automatic functioning of the corresponding receptor and effector centres of the cortical projection system. They resemble the behaviour of decerebrate animals, of which we are told that if the observer did not know that the brain had been removed he would believe them to be conscious.

That the depressed and exalted phases of the manic-depressive syndrome depend, respectively, upon states of cortical inhibition and states of cortical excitation has long been believed. We owe, however, a more definite knowledge of the mechanism of these conditions to the researches of Pavlov. As far as it is permissible to compare cortical processes in the dog with those of man, we may infer that the finely-balanced mosaic of cortical inhibitions and excitations with their dynamic interplay of irradiation and induction is replaced by coarser, badly differentiated areas of

inhibition in the depressed phase and by larger, badly inhibited areas of excitation in the exalted phase. Once the cortical equilibrium is thus profoundly upset the effect does not pass away immediately, but may last for weeks and months, as we well know from our own experience, and as Pavlov discovered from his observations on somewhat analogous conditions in dogs.

The foregoing remarks indicate the lines along which medical science is slowly advancing towards the solution of the problem of dissociation. The symptoms which we associate with the various forms of mental disorder are the outward expression of disturbances of cortical equilibrium. These symptoms tend to assume definite pathological complexes or syndromes, depending partly upon the nature of the cortical lesion or disturbance, and partly upon the constitutional temperament of the individual.

The clinical and pathological researches of Liepmann, Head, Marie and von Monakow and Pavlov's physiological experiments have broken down the artificial distinction which has hitherto separated physiological from psychical processes and reactions. They have also succeeded in laying the foundation of an objective psychology, the future achievements of which it is impossible to foretell.

Incidentally they throw a new light on existing conceptions of mental disorders, and move us to consider to what extent the present methods of dealing with the social and medical aspects of these disorders are either adequate or justifiable.

THE INTERVENTION OF THE STATE.

From many reliable sources we learn that up till the middle of last century the neglect of the insane in Great Britain was such as to leave the State no alternative to taking the responsibility for their care upon itself. It did this through the instrumentality of bureaucracies and of local authorities, both functioning under rigid legislative regulations. This method was, probably, the best that could be devised, and in the attainment of its object—the well-being of the insane—it has been surpassingly successful.

So far, however, as the advancement of psychiatry is concerned, this beneficent reform was attended by certain disadvantages. It called for the appointment of medical men to administer the system, but their number was so restricted as to be barely compatible with administrative efficiency, and their conspicuous faithfulness in the performance of the duties imposed upon them has caused psychiatry to suffer both in its literature and in its clinical experience. It created an artificial class of certified persons who have come to be regarded as the only mentally disordered portion

of the community. The instinctive aversion in the public mind to morbidity of certain kinds has expressed itself in an aloofness from this class, a dislike of the system under which they exist, and a distrust of the powers of certification and detention conferred upon the medical profession.

These prejudices are not confined to any class of the community, but may be discerned in the legislature, the law courts and the press. They are, probably, composite in character, but the fundamental error underlying them is that the certified insane alone are mentally disordered. A little consideration should convince anyone that as the certified insane are being constantly recruited from the general population, the latter must contain a large amount of latent and unrecognized mental disorder.

There are no means at our disposal whereby the mental efficiency (or inefficiency) of a community can be statistically estimated, but there are several significant points of view from which the position might be usefully regarded, one of which may be mentioned.

There is no single symptom in the whole range of mental disorders that is not represented in the mental processes of normal men and women. We are dissociated from our surroundings when we are engaged in any absorbing occupation; we are dissociated when we forget, for forgetting is as necessary as remembering; we are dissociated when we fall asleep, and when we dream we are insane. As we are neither omniscient nor able to see into the future we are credulous, superstitious and suspicious, and we develop many harmless delusions, the mechanism of which is the same as that of the delusions of the insane. We are only saved from insanity because our more or less efficient cortical mechanisms are able to correct our mental refractions and to inhibit our tendencies to abnormal behaviour.

It is abnormal behaviour (which is the outward expression of cortical dissociation) that determines the necessity or otherwise of certification. The person who certifies ought to be able to do so, not on the ground of abnormal behaviour alone, but also upon the nature and the cause of the cortical dissociation which gives rise to it. It is for this reason that medical education and medical experience are required for certification, and it is for the same reason that the statutory appointment of a layman to revise the opinion of a medical certifier can only be regarded as a device to allay public suspicion.

If proof were wanted of the prevalence of this public suspicion it may be found in the provisions of the Lunacy Act of 1890, which show less concern for the welfare of the insane than for the protection of the sane.

In any human system of the dimensions of the lunacy administration of the United Kingdom it would be foolish to assert that mistakes and abuses cannot occur; but they must be extraordinarily few in number. In my own experience, which has been long and varied, I have never met with a single instance of the deliberate abuse of certification or detention. On the contrary I have often had cause to deplore the hardship imposed upon patients and their distressed relatives through the natural reluctance of medical men to exercise their powers under the Acts.

The same prejudices which influenced the framers of the Act of 1890 can be discerned in the recent group of litigations in the English law courts. They appear not so much in the motives which actuated the litigants, or in the legal machinery, as in the atmosphere of vindictiveness which enveloped the proceedings, both inside and outside the law courts.

I happened to be in a distant part of the Empire at the time, but as the reports of these cases were published in the press throughout the English-speaking world, it was possible to follow their main features day by day and to observe their effect upon independent and detached individuals.

I noticed that the reports were received with an amused surprise—amusement that serious courts of justice should have deliberated for weeks over issues which appeared to present no great problems to the man in the street; surprise that the Mother of Parliaments should not have devised less clamorous methods for the adjustment of disputes involving such pathetic and morbid details.

At the same time we must not forget that if there were no Lunacy Acts it would still be necessary to restrain some of the insane, and that any person who felt aggrieved by such restraint would have the right to appeal to the Crown for redress. In such suppositious circumstances it is certain that very few actions at law would be raised, for whatever the source of the existing suspicions in the public mind, they are beyond doubt aggravated rather than allayed by the trend of modern legislation.

The contention that prejudices of this kind thrive on what they are fed on is borne out by the public feeling in countries where there is a comparative absence of suggestive and safeguarding enactments in lunacy legislation.

The people of Australia, 98% of whom are of British descent, have the firm determination to solve their own problems unhampered by many of the traditions which adhere to legislation in the Mother Country. Consequently the lunacy legislation of New South Wales (the original State of the Commonwealth) is simple and elastic in its administration. It is, nevertheless, as efficient as that of any

other country, and in its freedom from superfluous legal restrictions possesses many advantages. The formalities required for admission to mental hospitals are of the simplest description, consisting, for the most part, either of voluntary entry or of admission on the written request of a relative, accompanied by two medical certificates. The relative who signs the request must do so in the presence of a justice of the peace, but the function of the justice ends with that formality.

In the same State it has recently been arranged that every large general hospital should make provision for the accommodation and treatment of patients suffering from mental and nervous disorders. This was accomplished without legislative enactment, and with the co-operation and assistance of the Government Department of Mental Hospitals. Patients admitted to these general hospitals are not certified, nor is any judicial authority concerned with their admission or discharge. The City of Sydney possesses a modern, well-equipped psychopathic hospital, with 120 beds, admission to and egress from which is as free as in an ordinary general hospital.

Napoleon, when at the height of his power, remarked upon the impotence of force to organize anything, and added, "There are only two powers in the world, the spirit and the sword; in the long run the sword will always be conquered by the spirit." The scientific spirit behind psychiatry cannot be defined in Acts of Parliament. It tends to evade legal restraints and to break through official regulations in many directions, some of which are undesirable. It ought, therefore, to be guided into those channels which best subserve the well-being of the patients, the growth of scientific knowledge and the trend of healthy public sentiment.

There may be other means of attaining such an end, but the obvious means is the admission of all occurring cases of mental disorder to public hospitals without certification or judicial intervention. The great majority of patients and their relatives would welcome such an opportunity, and the patients, once in hospital, would remain there. There is, at present, sufficient legal machinery to deal with the small recalcitrant minority who would refuse to enter a hospital or to remain in it. As to the disposal of these uncertified inmates, they should remain under observation and treatment until recovery, or until a reasonable and liberal period of observation had shown that there was no prospect of early recovery or of any recovery.

In addition to existing mental hospitals, advantage should be taken of every opportunity of utilizing the many scientific facilities of general hospitals, by providing accommodation for the treatment

of mental disorders in their vicinity. Such a provision, on an enlarged scale, is especially desirable in every centre of medical education.

It is unquestionably the right of the State to guard the personal liberty of its citizens, but it is our mission to urge that our patients should have at least the opportunity of the same informal access to treatment which is accorded to patients suffering from other diseases. We believe that such an opportunity would rob mental disorders of some of the terror and opprobrium which attach to them. We also believe that it would bring psychiatry into closer relations with general medicine, whereby its scientific scope would be widened and its therapeutic efficiency improved.

I close with a reference to the vexed question of therapeutics, in which is illustrated both the slow methods of science and the unequivocal and verifiable results into which they ultimately resolve themselves.

General paralysis as a clinical entity was discovered by Calmeil just over 100 years ago. There followed later in ordered sequence the discovery of the spirochæte of syphilis by Schaudinn, of the blood test for syphilis by Wassermann, of the destruction of the organism in the living body by the method of Ehrlich, and of the presence of the spirochæte in the brain-tissue by Noguchi, and, lastly, the infection of the subject of general paralysis with malaria as a therapeutic measure by Wagner von Jauregg. This therapeutic method, though disappointing in some of its results, is significant as indicating a means of restoring cortical equilibrium which has been disordered by disease. If this method is not itself perfected, it will certainly be replaced in the near future by some similar and more effective agency.

I have referred to my own observations of the effect of an accidental pneumonic infection in temporarily restoring cortical equilibrium in two of the subjects of chronic mental disorder. Some of my colleagues in this audience must have had similar experiences, for these occurrences, though rare, are not wholly unknown.

We may look forward confidently to a time when physical science will have discovered means for the removal of cortical dissociation more permanent in their results and less dangerous to life than the rougher methods of Nature.
