

*The Ætiology, Psycho-Pathology, and Treatment of Mental Exhaustion and Paranoid States.\** By ROBERT THOMPSON, M.B.Belf., D.P.M., Senior Assistant Medical Officer, St. Patrick's Hospital, Dublin.

#### INTRODUCTION.

THE teaching that the brain is the organ of the mind is not often referred to by psychiatrists, no doubt because of the relatively barren results which followed attempts to link up psycho-pathological theories with neurological facts. It is, however, I think, essential that we should keep this fundamental doctrine in the forefront of our minds, and that we should remember that some day an anatomical or a pathological verification may be required for our psychological or psycho-pathological theories.

Many attempts have been made to draw up a plan of the structure of the mind, but I think that the plan of McDougall (1) is at once the most logical and the most serviceable to psychiatrists. McDougall conceives the mind to be an elaborate structure resting on many pillars called instincts, which supply the energy for the whole working of the mind. The upper stories of this structure represent character and the moral and æsthetic sentiments, together with will or volition. Lower down one finds habit and automatic action, and still lower, pure instinctive behaviour. However one may regard these matters, most of us would acknowledge that the mind can best be understood by considering its structure as a series of levels, the bottom level consisting of the instincts with their primary emotions, and the upper levels consisting of the most recently acquired sentiments with their finer volitional activities. Strangely enough, pharmacologists have seized upon these facts, and have advanced the theory that the excitement following the use of narcotics is due to a paralysis of the higher and more recently developed volitional and inhibitory levels, allowing of unrestrained activity on the part of the lower emotional and instinctive levels. To bring the matter nearer home one might compare alcoholic excitement with the excitement of acute mania, and, recognizing the striking similarity, apply the pharmacologist's theories to mania.

Let us consider here for a moment the dictum of Hughlings Jackson, that "a destructive lesion in any part of the nervous system tends to produce 'negative' results due to impaired function of the part affected, and 'positive' results due to loss of control

\* A paper read before the Autumn Meeting of the Irish Division, November 4, 1926.

of the injured part over other parts which are lower in the functional scale." Extending this dictum to the psychological aspect of mental diseases, we have, for instance, in mania "positive" effects in the form of great excitement, restlessness and elation, and "negative" effects in the loss of the inhibitory control over these emotional reactions. In delusional insanity we have also as "positive" effects many exaggerated and permanent emotional moods, principally those of anger, envy, jealousy and positive self-feeling, with, of course, corresponding delusions of persecution, and the "negative" effects are evidenced as before in the patient's inability to abolish or control these emotional moods. This structural plan seems to pervade the whole nervous system, and is simply demonstrated in the spinal cord by the exaggerated knee-jerks in disease of the lateral columns. Martin (2) has recently written a convincing article showing that epilepsy must be regarded as a failure of certain forms of inhibitory control, and not, as hitherto, of the nature of a cortical explosion.

It is interesting to recall at this stage that Shaw Bolton (3) places the volitional system in the second layer of the cerebral cortex (frontal lobe).

#### ÆTIOLOGY AND PSYCHO-PATHOLOGY.

I think it will be admitted by a majority of psychiatrists that, of all the causes of mental illness, long-continued mental stress must take first place. In 50 consecutive admissions to St. Patrick's Hospital during part of the year 1925 there was a marked history of long-continued stress in 22 cases. It has been argued, of course, that healthy people would not allow such stress to continue, and that therefore such a history would imply some previous instability, but with this view few of us will agree, and I feel satisfied that long-continued mental stress, either alone or in combination with physical illnesses, is sufficient to bring about a mental illness in what was previously a normal person. Mental stress largely consists of anxiety in one form or other, and the "contemplative fear" of Mott is an expressive description of some forms of anxiety. Mental stress is not confined to anxiety, and a person may be undergoing the most malignant stress and yet not be in the least anxious or afraid. This is especially so in the evolution of paranoid states, but here the stress is the inevitable outcome of the patient's personality. In the pre-maniacal state also the patient is rarely conscious of any stress or anxiety, and rarely consults a doctor. Disturbed sleep or a little nervousness is usually all that is felt, and the patient gives more and more freely

of his rapidly failing store of energy, until exhaustion or a toxic state completely upsets his balance.

A well-known anxiety is that connected with the illness of a near relative, and, in the opinion of Leeper, the nursing of relatives is the commonest single cause of mental illness. Here, of course, as in all other forms of stress, the anxiety is not unalloyed, but is combined with loss of regular sleep, gross neglect of proper nourishment, and often neglect of the hygiene of the body. Other forms of domestic anxiety and also financial worries are often in evidence, but the real anxieties which a normal person may have are innumerable and vary greatly in their effects. For example, fear of bankruptcy, a real anxiety to some people, has no terror for long-firm swindlers. Also, the anxiety must be personal and not collective. Great hardships can be borne collectively with little danger, as was shown by Bonhöffer (4), who found only 5% of insanity in the men who had undergone the rigours of the Serbian retreat. Here, although the general hardships were great, the conditions and reasons were well known, and I venture to think there was little or no individual anxiety.

If we accept the fact that prolonged anxiety is the main psychological factor in the ætiology of a group of mental diseases, how does prolonged anxiety bring about mental illness? Such a question justifies consideration.

The two emotions most frequently aroused by our contact with our fellows are fear and anger. Although anger comes into play largely in the development of paranoid conditions, fear, or its milder equivalent, anxiety, is almost ever present with us, and is a most valuable restraining and guiding force in our lives. We feel, however, that excess of this emotional condition for a length of time would be most harmful to the mind, and its actual effects on the mind are probably twofold. The first is most probably an exhaustion of the available nervous energy through the emotions, and the second a change in the balance of the mental forces, the will becoming increasingly unable to inhibit the emotion of fear and its ally despair, and the mind gradually becoming clouded by these emotional conditions. Delusions arise when the patient loses sight of the fact that he is ill, and attempts to give an explanation for the anxiety and despair he experiences. In fact, most of our beliefs about ourselves are mainly dependent upon the emotional mood we are experiencing at the moment.

Having granted all this prominence to psychogenic causes, I wish especially to draw your attention to the frequency with which definite physical illnesses appear to play a part in the genesis of mental illness. A history of an exhaustive or neurotoxic illness or

combination of illnesses is frequently given along with a history of mental stress, and indeed it must occasionally happen that a great part of the supposed mental stress has been due to the low state to which the body was brought by a toxic or exhausting illness. A considerable percentage of the admissions to St. Patrick's during the year 1925 exhibited more or less pronounced anæmia—perhaps caused by constipation or under-nourishment during the period of stress or other toxic factors. One sometimes does not realize how anæmic and poorly nourished a patient is on admission until one sees the contrast when that patient has recovered. The actual weight of the patient cannot always be taken as an indication of bodily health and vigour, as, although a patient may be well nourished, his muscles may be flabby and his tongue tremulous.

We will now consider another great factor, namely, toxæmia. In a small percentage of cases all the toxæmia one can find is intestinal, but in many cases the patient gives a history of an attack of influenza, after which "he was never the same." So often have I heard this that I have been forced to regard influenza as a dangerous neurotropic toxin, and all of us have met healthy people who were perplexed by the duration of the lethargy and depression which followed an attack of influenza.

Diphtheria figures in an undue proportion of St. Patrick's cases, the patient usually stating that he had a most severe attack (undiagnosed at first, as a rule) some years previously, and that he did not feel in good health for a year or more afterwards. I have regarded such a history as an important factor in the subsequent mental illness, even when the latter occurred years afterwards.

In a number of female patients the main cause seemed to be a long-continued menorrhagia, and several patients dated the very beginning of their symptoms from a severe prolonged hæmorrhage occurring at a miscarriage.

With regard to toxic foci in the body, many patients in St. Patrick's undoubtedly benefited by the extraction of septic teeth, and where permission to have these teeth extracted was not given, the illness often seemed to follow an obstinate course. In one patient who was confused, hallucinated and restless, the extraction of a number of septic and carious stumps was followed by great improvement. The hallucinations and restlessness had disappeared the following morning, and the confusion cleared up in about three weeks.

Finally I wish to draw your attention to the fact that a psychogenic stress in many cases is added to a toxic or debilitating illness, the unfortunate combination over a short period of time being more than the patient could withstand.

*Mental Exhaustion and Early Symptoms.*

I would like to discuss at this point the early symptoms of mental exhaustion, and to indicate those which should lead us to believe that we are dealing with a potentially grave condition and a possible forerunner of melancholia or confusional insanity, or, more rarely, of delusional insanity.

The patient usually complains of morbid thoughts, of obsessions, of loss of energy and inability to concentrate, but very often omits his most important and most obvious symptom—depression. These “morbid thoughts” often lead to the patient being treated as if suffering from “obsessions,” the deeper underlying depression and mental exhaustion being completely overlooked. In point of fact, I question whether it is wise to speak of any affection as an “obsessional neurosis.” The presence of marked obsessions always implies, in my opinion, grave loss of volition.

If the illness has lasted for a long time, the patient will have begun to elaborate all sorts of explanations for his depressed state, *e.g.*, sins of his youth. Further inquiry often reveals the fact that a few weeks or months previously there were periods relatively free from this anxiety and depression, but that recently these periods have become shorter or have ceased to exist. The relatives often state that, prior to the onset of depression, the patient was unusually active and energetic. That this energy is the outcome of an anxious restlessness, and often has no relation to mania, I feel convinced, although transient states of elation are common in exhaustion. A mother, for example, became unduly solicitous about the health and welfare of her children and could not make enough new garments for them. A commercial traveller scarcely took time for his meals, and for several months before his onset of melancholia motored about 150 miles per day. That he was not in a state of mania is borne out by his statement that he felt very depressed, and often deliberately speeded around corners in the hope that an accident would befall him. This man complained of poor and irregular sleep at this time, but my experience has been that, as a rule, these patients sleep quite well but for terrifying dreams and nightmares. In some cases, before symptoms become too pronounced, sleep is excessive, the patient preferring to remain in bed during the day. This may happen again during convalescence. Other symptoms are irritability, sudden changes of mood, outbursts of anger, mild persecutory ideas, headaches, noises in the head, and even transient hallucinations. Failure to carry out resolutions and duties (Mercier's amnesia) and over-scrupulousness are also commonly found. Where a number of these symptoms are present

the condition is sometimes termed "anxiety state" or "anxiety neurosis," but these terms are often, in my opinion, misleading. There is often little apparent anxiety, but marked depression, and yet one could not usually term the condition "melancholia." I would suggest, in common with other writers, such a term as "exhaustion state."

The first realization that a mental illness is imminent is most alarming to the patient, who often becomes acutely anxious and depressed and scarcely able to resist an impulse to suicide. One lady told me that the symptoms suddenly set in while she was on a train journey and that she had an almost irresistible impulse to fling herself out of the train. Many patients gave me a history of their illness (melancholia or mental confusion), commencing with pronounced tremors and shivering fits accompanied by acute anxiety and depression. An analogous condition may, I believe, be caused by sudden uncontrollable fear.

On admission, many of these patients are anxious and restless, and talk very freely about their "obsessions" and about the mistakes they have made which gave rise to these "obsessions." Depression may not be complained of at all. The first change very often is that the anxiety and restlessness disappear, but depression becomes well marked and the patient actively suicidal. This initial depression, which may be due to the absence of stimulation from friends and relatives, I regard as unavoidable, but it is also, if not anticipated, exceedingly dangerous.

The further course of such a case is familiar to all of you, *i.e.*, gradually lessening depression, both in intensity and length of periods, and usually, from the seventh to the twelfth week, a gradual return of confidence. Uncomplicated cases appear to run an almost fixed course of about four months.

#### *Paranoia and Paranoid States.*

The evolution of paranoia is a process of intense interest to psychiatrists. How is it that a person's mind can become dominated by an unalterable system of false beliefs, while the memory and the intelligence remain apparently unimpaired? It is now accepted, I believe, by a majority of psychiatrists that paranoia can only be evolved in a certain type of mind. The main features of this type are, in my opinion, apparent in boyhood, and I shall therefore attempt to describe the pattern of mind which, in later years, may be slowly moulded into that of the paranoiac.

A paranoid boy holds himself aloof from the rough and tumble of school life, and avoids the more humble games and the spontaneous outbursts of high spirits. He is often an exceedingly

industrious and methodical worker, and may regard the more important games as seriously as his work, taking an intense interest in them, but rarely seeming to enjoy them in the manner of other boys. Although usually a boy of high ideals, he may give way to strange outbursts of ferocious anger at the most trivial insult, and he would appear to "nurse his wrath" for days over the most harmless joke. While displaying a lordly contempt for those beneath him, he often exhibits an intensely subjective attitude towards his superiors, and is inclined to hero-worship. He has few friends, and never one for long, but his unbounded faith in himself seems to carry him through all difficulties unaided. Indeed, the other boys soon learn not to proffer advice, but to leave him severely alone. He will hold to the most absurd opinions with mulish obstinacy, and will rarely alter his plans to suit anybody. He will take a curiously mean advantage of holding up a rival to ridicule, but, if criticized himself, will seek revenge. Keenly conscious of the ridiculous in others, he is unable to appreciate humour directed against himself, as he fails to recognize its hidden sympathy, and hence believes it is simply a veiled insult. He is very ambitious, and plans his career irrespective of the wishes of parents or the advice of friends. Lasting attachments with other boys are rarely formed, and few boys have cause to remember him for anything but his strange "superiority" and obstinacy, his "touchiness" and outbursts of temper. Nevertheless, he is not easily ignored by those in close touch with him, as his make-up constitutes a distinct and forceful personality. Although never popular, he forces his way to the leadership in sports and study by reason of his energy and determination.

Generally, one may say that such boys display the egocentrism characteristic of all paranoid states, and by that one means, of course, that their main interests never seem to omit the "ego" or the well-being of the self.

Psychologically, one may say that these individuals have inherited a poor control over all those emotions which, as McDougall has shown, are aroused by contact with the environment, namely negative and positive self-feeling—anger, envy, jealousy, etc.—and that the opposing sympathetic and tender emotions have either been deficient in strength from birth or have never had the opportunity to develop. Both types of emotion cannot, of course, be experienced at the same time. As a consequence the altruistic and moral sentiments are poorly developed.

The remainder of the course in the development of paranoia can be easily followed. Positive self-feeling (probably the most permanent emotional mood of these people) will lead to intense

ambitiousness (a trend that is largely sustained by altruistic sentiments in the normal person). The paranoiac personality has a faith in his own abilities and beliefs not usually shared by those around him, and his superior, scornful attitude (also the direct outcome of exaggerated positive self-feeling) renders the sceptics actively antagonistic. Furthermore, such an individual, lacking as he is in the sympathetic advice of colleagues, makes endless mistakes, and the very memory of these mistakes stirs up angry feelings and desires for revenge. His ambition takes him to still more unfamiliar ground, and his increasing difficulties lead to one emotional storm after another, in which all the antagonistic emotions are experienced, but may, or may not, be actively expressed. An unusual period of stress or an exhausting or toxæmic illness finally destroys the already weakened inhibitory powers, and the mind becomes permanently clouded with emotions of hostility (anger, revenge, jealousy) and positive self-feeling. In attempting to account for the presence of these moods he is forced to evolve a system of persecutory ideas.

It will be noticed that the emotional conditions found in paranoia are entirely aroused by the environment, and are, therefore, always being brought into play. The exaltation of mania, on the other hand, is only partly dependent on the environment. One often meets, however, as one would expect, cases exhibiting symptoms of both conditions. There are few cases of paranoia that do not exhibit some of the characteristics of chronic mania. They are tireless in letter-writing and play the simplest game with excessive energy. Definite elation, characterized by jocular and witty remarks, is sometimes pronounced.

In fully developed paranoia with its permanent emotional mood one can understand why beliefs will be unchangeable in type, but one often wonders why it is that people in ordinary life will stick so obstinately to an obviously erroneous or absurd belief.

In the normal person, the act of accepting the belief of a friend is closely bound up with sympathetic relationships. One accepts the suggestion of a close or trusted friend much more readily than that of a stranger. Now the paranoid personality, lacking as it is in the sympathetic sentiments that come into play so prominently in the above mechanism, and therefore regarding so few people as trusted friends, will thus stick stubbornly to his own beliefs. If hostile emotions be aroused, as is most likely, the absurd belief will then be elevated to the position of a standard on the field of battle.

The attitude of suspicion, so often found in this psychosis, is sometimes puzzling from the psychological point of view. If one



remembers, however, that confidence—the converse of suspicion—is rarely based on an intellectual process, but is supported by tender and sympathetic sentiments, some of the difficulty is explained. Furthermore, suspicion is probably—in essence—masked hostility.

The amorous paranoiac has added to his other failings less control over amorous or lustful feelings towards a member of the same or opposite sex. The incomplete development of control over the sexual instinct leading to amorous and lustful phantasy—thinking and conduct—is only to be expected in a personality so incomplete in other respects. The tender feelings which actuate and guide these impulses in the normal person are apparently absent.

As a contrast to the strong and fixed emotional bias of this illness, one should note the *intellectual* reduction frequently characteristic of mental states depending on organic conditions, *i.e.*, general paralysis, cerebral tumour, interstitial nephritis. In these important duties are forgotten, absurd actions performed, and the memory is often greatly impaired. No fixed emotional state may be apparent and the patient is most tractable.

Former writers explained the evolution of the delusional scheme on the principle of *projection*. The patient was supposed to *project* his failings into the minds of others and, hence, to see there faults that were really his own. While it is obvious that a person must quickly recognize in another a trait with which he is himself familiar, such recognition might evoke sympathy as easily as hostility. I believe that the theory of projection owes its origin to the poverty of the paranoid mind in the tender emotions and altruistic sentiments. Rarely experiencing impulses of this nature in himself, he is unable to recognize them and, hence, assigns them as motives for the conduct of others, and easily arrives at the conclusion that avarice, lust for power, exploitation, hedonism, etc., are the motives for all human conduct.

## TREATMENT.

### *Mental Exhaustion.*

I now propose to discuss the treatment of such an illness as that described in the previous section. When possible, I would apply a similar form of treatment to the more advanced conditions of melancholia and confusional insanity. Paranoid conditions must, I believe, be approached from a different angle.

*Psychotherapy.*—The most useful psychotherapy I can conceive of is that the patient shall be given at the outset a simple, clear and definite picture of his illness and its causes. The fact that such

illnesses are common, even amongst the finest intellects, should be impressed upon him. In my opinion the main object of psychotherapy is to relieve the patient's mind from anxiety, and in the early stages of his illness, by reason of the intensity of his depression, these anxieties are very real and painful. It is, of course, utterly impossible completely to remove these anxieties, which often amount to delusions, until the depression which has given rise to them has disappeared. A simple, direct explanation, however, will often convince the patient for a short time of the real nature of his illness, and even this temporary relief must materially shorten the duration of the illness. The actual anxieties which these patients may have are, of course, legion. Some trivial incident or mistake of youth is, as a rule, resurrected to explain the depressed state, and to impress upon all his friends that he can never recover and must become hopelessly insane. This latter fear is probably best dealt with by a diatribe against the word "insanity," and by assuring the patient that his illness is simply due to depression, the result of exhaustion, and that nothing worse can occur.

Fear of insomnia is very pronounced in some cases, and a useful line of attack here is to point out that absolute sleeplessness for several nights in succession is, of itself, harmless, and that it is the dread of the supposed effects of insomnia that is worrying them. This view, I should point out to you, is contrary to that of Sir Maurice Craig (5), who believes that insomnia should be dealt with energetically. Personally, as I have said before, I find that these patients sleep quite well—with perhaps an occasional disturbed night—when given 15 gr. of ammonium bromide three times a day.

It must be expected that, no matter how successfully one deals with a patient's worries, similar or new ones will recur the following day, if not earlier, with the recurring depression. The few hours of comparative relief which a rational reassurance may give must, however, assist the process of regeneration and shorten the illness.

After putting one's finger on the main worries of the patient and dealing with each one in turn, I think one ought to discourage outbursts of confidence on the part of the patient, or the unnecessary revealing of intimate matters. During the early stages a patient ought to receive some support from the doctor, at least once daily, but he should be told to expect many absurd and morbid thoughts and anxieties until convalescence is firmly established, and he should be encouraged to inhibit many of these by his own strength of will, and only to reveal the overmastering ones. Unless there are special indications, the discussion of intimate or sexual matters should be discouraged, as I feel certain that the recovery of many patients must be prolonged or even greatly jeopardized by

regrets at having needlessly disclosed them during the acute stage of their illness.

*Physical Treatment.*—In the physical treatment of these patients there is nearly always an indication for a prolonged course of iron, on account of the anæmia met with. In the under-nourished, depressed and amenorrhœic young girl, especially, the results at St. Patrick's have been gratifying, and few patients failed to respond to a lengthy course. For the first two or three months bromides should be prescribed in gradually decreasing doses. Depressed patients do better on bromides, and it is the only drug I know of that in some way seems to lessen the intensity of the depression. Conversely, the excitement of maniacal patients often seems to be aggravated by bromides.

A useful prescription for the first month or six weeks is :

℞ Ammon. brom.	.	.	.	gr. xv
Ferri. et ammon. cit	.	.	.	gr. vj
Liq. arsenicalis	.	.	.	ʒ ij ss
Aq. ad	.	.	.	ʒ ss
ʒss <i>t.d.s.</i> ; <i>ex. aq. p.c.</i>				

When the bromide is omitted, the arsenic should also be omitted. The iron may be continued almost up to the discharge of the patient. Any noteworthy reappearance of depression should be promptly met with an aperient and a temporary return to the original maximum dose of bromide. Stronger sedatives or hypnotics should rarely, if ever, be prescribed, with the exception of paraldehyde, and even this drug, in the opinion of Leeper, may be greatly abused. When required, it is most useful in ʒ ij doses at night, and, although harmless for occasional administration, it should only, I believe, in very exceptional cases be continuously administered. I agree with Cole (6) and Masefield (7) that sulphonal has deleterious effects on the delicately constructed cortical nerve-cells. The latter author attributes many cases of asylum dysentery to this drug. Many promising cases must, undoubtedly, be checked in their recovery by the use of strong hypnotics or sedatives, and the positive value or the rationale of the administration of these drugs has never, to my knowledge, been demonstrated. With good nursing and patience, sleep occurs perfectly well without them. They do not lessen anxiety, until the patient is almost stupefied, and they cannot be required for the sleeplessness and excitement of mania, which is, as every psychiatrist knows, usually recovered from, and appears to be almost harmless to the patient. Last year there was discharged from St. Patrick's a lady who had just had her twenty-second annual attack of mania. This patient, after

spending twenty-two winters in St. Patrick's with acute mania—restless, destructive, degraded, noisy and sleepless, night after night—went out to take up a prominent social position, apparently none the worse for her illnesses.\* She had scarcely ever had a hypnotic or sedative of any kind, and hyd. c̄. cret. was substituted.

In recent cases of acute mania Leeper has got excellent results with repeated doses of calomel gr. iv–v *nocte* several times weekly for a few weeks, and this treatment is now followed as a routine in St. Patrick's Hospital. Tonics are administered, as before, after the first week or ten days. In depressed patients calomel tends to increase the depression.

If one accepts the conclusion, as I think one must, that in every mental affection there is an impairment of function of some group or groups of cortical nerve-cells, then the obvious treatment would include nerve tonics, but, so far, I am not satisfied that any of the so-called nerve tonics (glycero-phosphates, etc.) has any specific effect on the cortical nerve-cells.

#### *Paranoia and Paranoid States.*

The treatment of early paranoid states must be largely empirical, because these patients rarely consult a doctor, and would usually, in fact, be highly offended if it were suggested that they needed one. Still, relatives sometimes persuade them to see a doctor, or they may consult a doctor of their own accord for depression or sleeplessness—two symptoms which often accompany their emotional storms—and one must decide on some form of treatment. If the patient admits being “run down,” one may prescribe tonics, in the form of iron, etc., but as a rule these patients either take medicine reluctantly or refuse it altogether, and, in any case, treatment of their physical condition must take a secondary place. Where it is at all possible, the obvious and, as a rule, the only effective treatment is an immediate and lengthy change of environment. The change should be as complete and as long as possible, for the dangers that lie ahead are very real. Companions should be chosen carefully, and only those who have a sensible grasp of the nature of the illness should be allowed to accompany the patient. The complete change, away from all objects and persons around which he has built sentiments of hatred, gives the patient the best chance of recovery. A congenial occupation should also be selected, and it may be advisable to allow the patient to occupy himself thus very fully, of course stopping short of exhaustion. In contradistinction to nearly all other mental illnesses, I do not think early

\* This patient has been readmitted for the twenty-third time.

treatment in a mental hospital can be advocated for this type of patient. The enforced seclusion from the outside world affords him the strongest of proofs that he is the victim of a conspiracy or persecution. The physician, however, must always bear in mind that these patients are potentially both homicidal and suicidal, and the inability of relatives to guard against such contingencies is the strongest indication for certification. It must also be remembered that a mental hospital is a complete change of environment, and many patients recover to a marked extent after some months' residence. While in the hospital, a congenial occupation is almost the only treatment possible. Any conversation bearing on the patient's case or symptoms is usually resented by him, and I believe should harm, and even the volunteered information of the patient does best be commented upon in a general and guarded manner.

Medicines, apart from any necessary purgatives, are usually resented, and may strengthen beliefs of poisoning, etc.

On their reaching a certain stage of convalescence, it is a difficult point to decide whether to allow these patients out on trial or not. Refusal to do so usually means permanent detention, while acquiescence may be fraught with terrible risks. On the whole, however, I think the risks are over-estimated, and that, given sensible and willing relatives, trials at home or with friends might be allowed with advantage to these patients.

If a case is seen very early, *i.e.*, before the development of fixed delusions, it may be ideal to give the patient a certain amount of insight into his condition, and gradually to train him to be on the alert to control and banish, by his own will-power, his antagonistic emotions. But this treatment is rarely practicable or even advisable, as it is a delicate and dangerous procedure, and one may lose for ever the confidence of the patient. The immediate treatment should probably always be a lengthy and complete change of environment.

In conclusion I wish to express my sincere thanks to Dr. Leeper, not only for permission to make full use of the records of the Hospital, but also for his advice and criticism.

*References.*—(1) McDougall, *Social Psychology, Outline of Psychology, Primer of Physiological Psychology*.—(2) Martin, *Lancet*, ccx, No. 5354.—(3) Shaw Bolton, *Cole's Mental Diseases*, 3rd ed., p. 28.—(4) Bönhoffner, Mott, *Journ. Ment. Sci.*, lxxi, No. 295.—(5) Sir Maurice Craig, *Lancet*, Special No., "Early Treatment of Mental Diseases."—(6) Cole, *Mental Diseases*, 3rd ed., p. 316.—(7) Masefield, *Journ. Ment. Sci.*, lxxii, No. 297.