THE JOURNAL

OF

MENTAL SCIENCE

(Published by Authority of the Medico-Psychological Association of Great Britain and Ireland).

EDITED BY

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"Nos vero intellectum longius a rebus non abstrahimus quam ut rerum imagines et radii (ut in sensu fit) coire possint."

FRANCIS BACON, *Proleg. Instaurat. Mag.*

VOL. XXXV.

LONDON:
J. AND A. CHURCHILL,
NEW BURLINGTON STREET.

MDCCCLXXXIX.

"In adopting our title of the *Journal of Mental Science, published by authority of the Medico-Psychological Association*, we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the terms, mental physiology, or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid, for although we do not eschew metaphysical discussion, the aim of this Journal is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and 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, are not less questions of mental science in its practical, that is, in its sociological point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our Journal is not inaptly called the *Journal of Mental Science*, although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow men, may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science, with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study."—*J. C. Bucknill, M.D., F.R.S.*

THE JOURNAL OF MENTAL SCIENCE.

[*Published by Authority of the Medico-Psychological Association of Great Britain and Ireland.*]

No. 149. NEW SERIES, No. 113. APRIL, 1889. VOL. XXXV.

PART 1.—ORIGINAL ARTICLES.

Insanity following Surgical Operations. By C. T. DENT, F.R.C.S., Senior Assistant-Surgeon to St. George's Hospital; Surgeon to the Belgrave Hospital for Children.

So far as my researches extend little attention has been paid to the subject of this paper. Yet I think it would be rash to assume that what is unrecorded is necessarily rare, even in days when so much more is put into print than any of us can either read or mark, much less digest, and when the number of writers seems in danger of exceeding the number of readers. Insanity, in some degree, as a sequela of surgical operation, though certainly rare, is, I believe, less uncommon than usually supposed, and it is chiefly in the hope of eliciting additional information from others that I venture to record my own small experience. On two subjects medical science has still an infinite deal to learn: first, the influence of disease on the mind; secondly, the influence of mind on disease. In attempting to contribute a little to the first-mentioned subject, I can really deal only with a subdivision of it, viz., the effects that may be produced on the mind by surgical measures undertaken for the relief of disease.

In three ways a surgical operation may obviously produce physical disturbance; (1) by anticipation; (2) by the actual operation, which may cause pain, afford relief, entail shock, etc.; (3) by the after-effects. These, like the actual operation, may act by producing pain or giving relief, or by setting up septic mischief. A more important factor still in producing physical disturbance is mental reaction. The importance of this factor is usually underrated even if its very existence is not ignored; yet it needs only a moment's thought to convince us that in the vast majority of cases a patient can

hardly steel himself to undergo an operation with the same equanimity that the practised surgeon can to perform it. The relaxation of control previously exercised, the loosening, as it were, of the mental tension, or the physical disturbance resulting from the removal of a diseased part which had led to much mental contemplation and called up unduly the subjective qualities of human nature, are all factors which, to say the least, must be taken into account more or less in successful after-treatment. The sea may calm down after the storm has disturbed it, but once in a way wreckage will be seen floating on the surface. Without attempting any classification of degrees of mental disturbance, I may, for my present purpose, be allowed to indicate certain arbitrary grades which everyone recognizes. Starting from a healthy condition of normal mental equilibrium, we speak in an ascending scale of Emotional disturbance, Hysterical disturbance, Loss of Control, Unreasonableness, Delusions and Hallucinations, and Mania in its various forms. Such rough classification is employed merely for the purposes of present argument.

With regard to the first-mentioned cause, anticipation, little need be said. Everyone has experienced its effects. Lives there the man so hardy or so fortunate as never to have felt what is familiarly termed "nervousness" at the anticipation of a slight surgical operation, such as the extraction of a tooth or the removal of a foreign body from the eye, however skilfully we may know it will be performed, and however certain we may be of the result. In short, we become to a greater or less degree emotional, or even more; the effect is very transitory as a rule, but it may readily pass to a higher degree, such as loss of control, or unreasonableness. Our eyes, our ears, too, for that matter, can without difficulty obtain evidence enough of the physical phenomena produced by anticipation in the dental department of any hospital; and I suppose any dentist could cite instances enough in which tolerably profound mental disturbance has followed tooth extraction. Cases are given below in which mental disturbance so grave as to amount to insanity has followed such slight operations. Recently I had a patient in St. George's Hospital who suffered from urethral stricture. The man was said to be a bleeder, and, like many of that class, was naturally an emotional subject. He was greatly interested in his own complaint, and on nearly every occasion when I succeeded in passing an instrument through the stricture he burst into laughter, only a shade removed

from a hysterical explosion. Here there was a very slight and temporary disturbance, and an almost immediate return to the normal mental equilibrium. The instance, though trifling, is not uninstructive. There is no need now to multiply cases, and I may rest satisfied with pointing out that anticipation in its relation to mental reaction after surgical operation has an obviously important bearing. In the case of persons with strong hereditary tendency to insanity we are often enough able to watch the various grades I have named develop one after another pretty well in the order given, till finally the mania becomes pronounced; similar results may occur also in those who have no such tendency, though in the vast majority the pendulum swings back again to the normal standard.

Again, with respect to the second of the three modes in which operations may affect the mind, namely, the actual operation, I need say little. The mental effects immediately following operation are of course familiar enough, but they could much better have been studied in pre-anæsthetic days. As a rule, we see rapid recovery follow. Sometimes, however, the effects are a little more persistent. Thus, after much loss of blood we shall see loss of control, perhaps unreasonableness for a while, or delusions. We reassure the friends, and tell them that all these symptoms will soon pass away; and so they do usually, but not always. They may persist. Thus it is no uncommon thing to see persons in a deeply hysterical state, continuing for days, after the extraction of a tooth, where no anæsthetic was administered. I well remember the case of a lad, about sixteen years of age, who was being treated for disease of the knee joint. A carious tooth, which was occasioning him much pain, was extracted without any anæsthetic, and persistent bleeding followed. The boy stoutly denied that he was a bleeder. He grew worse, notwithstanding every effort, and the hæmorrhage persisted. He absolutely refused to give the address of his parents or friends whom we desired to send for. Ultimately the mother's address was discovered, though not from the boy. We learnt from her that he had been subject to bleeding all his life, and that on two or three occasions, one being after the extraction of a tooth, he had nearly died. The boy recognized his relations, but treated them with the most absolute indifference. He talked rationally, though making constant complaints of a groundless nature to within a few minutes of his death.

Slight operations, such as circumcision or the division of a tendon in a child, may lead to the development of a rash, resembling that of scarlet fever, all over the body when no anæsthetic has been given. In some patients the evidence of such disturbance is not seen on the skin, but may spend its force more centrally. The mind may become affected, and we shall then recognize the commotion by other senses in addition to sight. From the very moment of an operation, too, may date a persistent mental disturbance of a grave nature. The patient never recovers consciousness, or, in other words, does not revert to his normal mental equilibrium. For days or weeks he may practically not recover from the mental condition into which the anæsthetic plunged him. Such a case is mentioned by Dr. Savage as having occurred in the practice of Mr. Croft.* Dr. Savage attributes the insanity in this case to the effect of the anæsthetic; ether had been given. I am disposed in this particular instance to agree with him that in some cases there is a causal relation between the anæsthesia induced and the insanity. I believe in most cases, however, there is no such relationship. The subject will be discussed later on. For the present I need only remark that it will be conceded that some mental disturbance is produced by the operation, which may, and often does, attain the degree of loss of control, delusions, or what not. But it would be arbitrary to assert that these are fixed degrees, beyond which the disturbances may not travel. If the mental disturbance may from a given cause attain to one degree, further or continued stimulus may cause it to rise to another on the same scale. If, therefore, mania bears but the same relation to, say, emotional disburbance that the boiling point bears to, say, summer heat, the one condition may pass on to the other.

So far, then, I have attempted merely to show that there are no logical grounds for the assumption that the shock of a surgical operation may not act like any other shock, and give rise to insanity in a person of mental instability; but I may say at once that in the majority of cases I have seen or collected there was no history of mental instability either natural or inherited. Now this is a remarkable fact even when we admit to the full the extreme difficulty in most instances of eliciting a reliable history of insanity or neurosis. It is the special object of this paper to call attention to a class of

* "Insanity following the use of Anæsthetics in Operations." By G. H. Savage, M.D., "Brit. Med. Journal," December 3, 1887.

cases in which, after the operation, the mind reverts to its normal condition, but subsequently, after a greater or less lapse of time, symptoms of mental disorder begin. Some of these cases I have had actually under my own observation, some have been kindly communicated to me by others, and a few, far too few, I have collected from published records.

The first case to be mentioned was under my own observation, and occurred in a lady of a rather neurotic type; no hereditary tendency known; liable to occasional attacks of hysteria. Two rather severe operations had been performed at an interval of about a fortnight; recovery from both was perfectly satisfactory; temperature normal throughout, and the wounds were, I believe, perfectly aseptic. Some mental depression before the operations. Fair mental reaction followed; one or two hysterical attacks occurred during convalescence, passing off in a few hours. Some eight weeks after the operation another attack came on, and assumed more formidable shape. The hysterical behaviour became very pronounced; loss of control, in fact, to a great degree, supervened. The patient would scream or cry at the least thing; she became unreasonable, and conceived an intense and irrational dislike to a friend in whom ordinarily she had absolute confidence. The symptoms were those of a mildly delusional condition. The temperature was normal, and the healing of the wounds progressed with satisfactory rapidity. The patient acknowledged her condition, and regretted it. The prognosis therefore was good. Recovery took place in a few days, and no further trouble occurred. The chief point that is noticeable in this case, and the only one on account of which I mention it at all, is that the mental disturbance occurred at an unusually long period after the operation, viz., about eight weeks. I believe, however, that the attack was a direct sequela of the operations, for the minor hysterical explosions that occurred on two or three previous occasions linked the more severe trouble, as it were, to the others in a continuous chain. Iodoform was freely used.

The next case is in many respects a remarkable one, and may be given with a little more detail. It is that of J. W., aged 10, who was under my care for disease of the knee-joint. The boy was bright, fairly intelligent, not unduly precocious in any respect that could be discovered; no hereditary tendency to insanity, and, in fact, no disorder could be found save that of the knee. Some six weeks after his admission I excised the knee-joint by M. Ollier's method, making a vertical incision and sawing through the patella. All the diseased granulation tissue was removed; the patella was sutured and left. It was found necessary to take away a thin slice of bone from the femur as well as the tibia. Ether was given, Clover's apparatus being employed. The antiseptic agent used was corrosive sublimate, a point worthy of remark, for consider-

able disturbance, sometimes mental, may follow the use of carbolic acid in operations on the bones in children.* Three days after the operation the wound was dressed and looked quiet. Nothing abnormal in the mental condition. About a week after the operation the boy began to be noisy at night; he developed, pretty rapidly, sub-acute mania, and was placed in a separation room. He slept during the greater part of the day, but it was a bad kind of sleep—a temporary torpor or suspension of the faculties rather than a rest. Then he revived rather than awoke, and would fall to singing or chattering foolishly or irritably. For a while, too, his habits became dirty. He constantly complained of feeling "tired," and I have no doubt this was a true expression of the condition of one who enjoyed organic but not mental sleep. The temperature, as usual in such cases, rose at times, but there was nothing in the chart suggestive of septic trouble, nor did the condition of the wound or the boy indicate any such mischief; in fact, the wound progressed favourably enough. The hair became coarse and stiff; the boy was incessantly biting his nails, and was fretful and peevish. At first he showed no recognition of his relations; after a while he modified in this respect to the extent of exhibiting marked dislike to his mother. Endeavours to interest him in life and to persuade him to occupy himself met with very partial success. We sought at one time to amuse the boy by furnishing him with a block of wood and a judiciously blunt knife. For a little while he became interested in carving; then he endeavoured to eat the chips he cut off, and we had to seek other distractions. Improvement gradually took place.

Some weeks after the operation it was found necessary to open a small abscess which had formed near the wound, possibly from the irritation of a leathern splint. Chloroform was given; the boy took this anæsthetic well, and recovered naturally. At this time he was the victim of delusions, imagining someone was coming to kill him. A month later he was sufficiently quiet at night to return to the general ward. In a case such as this in a general hospital isolation is necessary; for the boy's own sake it was, I think, undesirable, and he would probably have recovered more quickly if associated with other lunatics; but we had no choice in the matter. Complete recovery ensued. The union of the excised knee remained rather soft, and the possibility of having to amputate the limb was raised. However, as the boy was gaining ground physically, and his mind was reverting to its normal condition, I thought it best to leave the limb alone. The case then was one of sub-acute mania, with melancholia and delusions, which ran a chronic course, and was remarkable on account of the youth of the

* Confer in this relation a paper by Mr. Barwell, "Clinical Society's Proceedings," Vol. xviii., pp. 201, 202. Carboluria occurs more frequently in children than in adults, and the renal disturbance might by some be held accountable for the mental disorder.

patient. At no period of the disease, to the best of my belief, was the boy's condition septic. No iodoform was used, at any rate before the insanity began.

My next case need only be briefly mentioned: it is that of a thin, feeble woman, aged 65, with symptoms of granular kidneys. The thigh was amputated for a large epithelioma of the leg. Ether was given for the operation (in such patients I now prefer to give chloroform). The stump did badly. Eleven days after operation mental symptoms were first noted. The woman was restless and maundering. The flaps broke down, and thirteen days after operation there was some low cellulitis about the thigh. Very slight elevation of temperature. The mental condition grew worse; she failed to recognize those about her or her relations, and gradually drifted into a condition of senile dementia. Her habits were dirty; some bedsores formed, but healed up again, as did the stump to a great extent; but when discharged to the infirmary, seven weeks after operation, there was still a long unhealed sinus, lined with flabby granulations, extending up the back of the thigh. In this case there was no history of insanity. The patient's mental condition for some days after operation was normal; but then she developed chronic mania, passing on to dementia, which promised to be incurable.

My colleague, Mr. Bennett, has kindly permitted me to mention the case of a man under his care somewhat similar in one or two respects to the foregoing.

The patient was aged 43, and is described as a very alcoholic man. He stated that he had been in the habit of taking ten quarts of beer daily, and was said to have had an attack of delirium tremens on one occasion. He was operated on for the radical cure of a huge scrotal hernia, which rendered his life burdensome. Ether was given. Three days after operation, having been previously normal in his mental condition, he became tremulous and noisy. Bromide of potassium was given, and he became quieter. The wound became foul, and the temperature rose to 103°. Eight days after operation the notes of his case say "tremulous and irritable. Talks wildly about his private affairs." The temperature soon fell, but the mental condition persisted, though he became quieter. Four weeks after operation the notes mention—"Takes no notice of what is going on around him; is in a state of dementia." Nine weeks after the operation the wound had healed, and he was more rational. For a while, however, he became noisy again, especially at night, and isolation was found necessary. Ten weeks after the operation he was removed to Bethlem Hospital. In this case the onset of the mania was little matter for surprise. The delirium, which might almost have been expected in so alcoholic a patient, would readily enough pass on into insanity. Indeed, it was remarkable

that recovery from the surgical procedure took place, and the point on which I specially wish to remark in connection with this case is that it furnishes a good example of how little prejudicial effect these attacks of insanity following operation have on the progress of a wound. At the same time the prognosis, as regards the mental condition, was unfavourable.

I must run the risk of becoming tedious by the mere enumeration of cases; but the following instance is remarkable in many respects, and I can find but few recorded of a similar nature. It is noteworthy because the mania was of a very acute type, because it followed the operation of ovariotomy, and because it ended fatally.

Sarah C.; married; aged 48; was admitted February 1, 1883, to St. George's Hospital. She had had eight children, of whom six were alive and well, and the youngest six years old. She had always lived in the country, was of healthy appearance, of slightly reserved manner; hair dark, smooth, and commencing to turn a little grey. Absolutely no history, even remote, of hereditary disease, and no trace of insanity in her family, concerning whom she readily gave me full particulars.

Four years previously she had noticed a small swelling in the abdomen on the left side; this increased rapidly up to a certain point, and then appeared to remain stationary. A year before her admission the swelling was tapped in a provincial hospital and fluid withdrawn. The feet and legs were occasionally œdematous, but the tumour gave rise to no other physical signs.

Ovariotomy was performed on February 17th. No adhesions were found and no difficulties of any kind presented. The tumour consisted of one large cyst, and several smaller cysts, all containing blood-stained fluid. The pedicle was tied with twisted silk ligature; strict antiseptic precautions were observed, and, so far as I could see, efficiently carried out. Ether was given. The progress of the case subsequently for the first six days was satisfactory enough; she was cheerful, anxious to get well, and slept and ate normally. On the sixth day her physical condition was satisfactory, but her expression had entirely altered. She still recognized her husband and those of us who were immediately concerned with her care, but her mind was full of delusions varying in their nature, but all to her of an alarming character. She was very restless in bed. On the eighth day she was in a condition of acute mania. She recognized no one, attempted to injure those about her, and was very violent. The hair became coarse and rough. My friend Dr. Savage was kind enough to see the patient with me, and looked upon it as an ordinary case of acute mania. The wound was dressed on the eighth day, for the first time. There was a little superficial suppuration in the wound, where she had

torn the edges apart in her struggles, but in all other respects, so far as the immediate operation was concerned, everything was perfectly satisfactory. During the next eight-and-forty hours the mania continued with undiminished intensity. Her physical condition became weaker, and the greatest difficulty was experienced in getting her to take any food. She died exhausted on the eleventh day. The mental condition did not seem appreciably to affect the actual progress of the surgical aspect of her case. But the insane mind in a body which was sound, save from the effect of the operation, decided which way the balance should fall. No iodoform was used, nor carbolic acid; no peritonitis was found, nor, indeed, anything in the abdomen worthy of note, at the post-mortem examination.

A few other cases have been recorded of insanity following ovariotomy. In some there was a hereditary tendency to insanity; in others, as in mine, this appeared to be absent.

Thus, Mr. Barwell has recorded a case in which a slight attack of insanity followed ovariotomy and the patient made a good recovery.* Reference is made in the paper to other cases. Mr. Sydney Jones kindly communicated to me a case occurring in his hospital practice. Here there was a tendency to insanity, and the patient had previously been in an asylum for three months. Her condition was attributed to the abuse of morphia. At the time of operation there was no trace of insanity. Acute mania commenced on the third day and reached its height on the fifth after operation; she then became quieter, but died very suddenly on the same day. The case of a patient was communicated to me from the Middlesex Lunatic Asylum, who suffered from an ovarian tumour, and had been subject to attacks of recurrent melancholia (the form of insanity most often associated with disease of the sexual organs), but symptoms of mental disorder had been for a long time in abeyance. Three days after the operation of ovariotomy she became very insane with melancholia.

It is somewhat remarkable that in most of the cases I have collected the peritoneum has been involved in the operation. Thus my colleague, Dr. Champneys, had a curious case at St. George's Hospital; the patient, a woman aged 53, a medical rubber by occupation, was naturally rather a talkative and excitable person, on the emotional side at any rate of the commonplace or perfectly balanced. Hysterectomy was performed, the whole organ being removed per vaginam for cancer of the cervix uteri. Ether was given. Two days after the operation the patient was found to be in an extremely nervous state, exaggerating all her sensations greatly. Gradually this condition became more and more intensified; she grew more restless and garrulous,

* "Clinical Society's Transactions," 1885, Vol. xviii., p. 199.

and made constant unreasonable complaints. Then she had delusions; for example, one day she imagined she was unable to swallow. Some milk was poured into her mouth and the nostrils closed, whereupon she swallowed, and remarked that "a weight had been lifted off her forehead and some strings at the back of her head had been broken." One noteworthy symptom she had midway between a delusion and hallucination: she asserted that she was unable to see, although it was her habit to write letters to people. She suffered, like many of these patients, from time to time from diarrhœa, but her chief complaint might more fitly have been termed logorrhœa. A fistula formed, and the patient had to be kept for some time in hospital, but it eventually closed. Her mental symptoms improved, but when she was discharged, after about five months' stay, she had not recovered completely. About a year after the operation we heard that the mental symptoms still persisted.

In a feeble man, aged 53, operated on by Mr. Pitts, of St. Thomas' Hospital, for strangulated hernia, delusions and melancholia occurred on the fourth day. Complete recovery followed in about a month. There was no family or personal history of insanity. Dr. W. J. Collins has recorded a case * in which mental disturbance began the day after operation, and culminated in acute mania on the tenth day in a man aged 69 who suffered from a strangulated inguinal hernia. Recovery followed. Chloroform was given and iodoform used. Here the symptoms were thought to be possibly due to the anæsthetic. Dr. Shepherd has recorded six cases of mania following operations,† and refers to others. Three of Dr. Shepherd's cases followed operation on the abdomen and its walls. Two of the cases had a distinct family history of insanity, another was an epileptic, and a fourth "had always been queer, and at times very excitable." In one the family history could not be ascertained, and in the remaining case, though there was no distinct history of insanity, several of the relations are described as having been very peculiar. Most, if not all, of Dr. Shepherd's cases then must be classed with the less remarkable variety in which there is a tendency to insanity. I know also of cases in which acute mania came on after tenotomy (no inheritance), and after perineal section (possibly inheritance).

A case recorded by Dr. Davidson‡ is of interest, for the operation was grave and no anæsthetic was used. A railway guard (age not stated) had his thigh amputated for severe compound fracture. The man was in a semi-comatose condition at the time of operation. The flaps sloughed. Acute mania attacked him, but it is not mentioned on what day after the operation. He had delusions. Insanity lasted three weeks or a month, and recovery took place.

* "Lancet," December 15th, 1888, p. 1175.
† "American Journal of the Medical Sciences," December, 1888.
‡ "Lancet," Vol. i., January, 1875, p. 73.

No history of insansity. The accident may have been the exciting cause in this instance rather than the operation. It makes little difference for my purpose.

I prefer rather to record the above cases simply than to attempt to draw any very definite conclusions from what is, after all, but a small number. Yet a few remarks, more in the nature of comments on the cases cited, may not be out of place. I think with regard to the group of cases affecting the female sexual organs that an impression prevails that insanity is more apt to follow operations of this nature than others, and that this is due to functional disturbance resulting from the parts removed; but removal of an organ such as a diseased ovary would be more likely to improve than to impair the functional capabilities of the other if sound. It is not so much the actual as the contemplated loss of function that gives rise to mental disturbance in those who have disorders of the generative apparatus. In a person mentally sound at starting, development of ovarian or uterine disease is apt to lead to constant introspection and to a self-contemplative subjective condition. In such an operation—ovariotomy, or hysterectomy, or what not—is but the disturbing force that tips up the balance. In this connection I may mention incidentally that I altogether traverse Mr. Barwell's remark (*op. cit.*, p. 202): "Insanity from such cause (viz., disturbance of the generative organs) usually leads to words and actions which betray its origin. Now, my patient never let fall an obscene or a doubtful word," etc. Surely disease of the uterine organs is associated commonly with melancholia and hypochondriasis, not with mania presenting symptoms of an erotic type. If hallucinations exist, they will probably be connected with the sense of smell. In one recorded case, hallucinations of this nature passed away after ovariotomy had been performed on a girl who was insane.

Although I have recorded, and wish especially to draw attention to cases in which insanity has followed surgical operation where no heredity could be traced, I have cited others in which such a tendency did exist. It follows that we ought to look—perhaps specially in cases of disease of the sexual organs—to the mental condition before operation. We cannot have too many data on which to found a prognosis. To my mind, indeed, the mental condition ought to be considered as carefully as that, for example, of the kidneys before all operations. Thus quite recently in a man who suffered from a painful ulcer of the rectum, and who

was rather eccentric in his manner, I was able to predict the probability of increased mental disturbance following operation of division of the sphincter. Such disturbance did, in fact, occur, but passed off after a few days.

It is beyond the scope of this paper to do more than allude to a class of cases which may seem to bear a very close relation to those I have chiefly considered, viz., cases of puerperal insanity. In some of these I believe the insanity to be due to the anæsthetic, in cases, that is to say, where the mental disturbance immediately follows delivery. In a second class the insanity occurs about the second week, and these would seem to be most akin to the cases I have described. Finally, there is a form of puerperal insanity which is generally believed to be due to septic conditions. But in nearly all cases of puerperal insanity the patients have hereditary or natural tendency. Insanity after surgical operations may, as I have shown, occur in those who have no such tendency. Of course, the septic form may occur after surgical operations, but it may, as shown by my cases, ensue when there is no septic mischief. I do not myself think it probable that insanity following surgical operations is more rare than that following the puerperal state. It is true that puerperal insanity is by no means uncommon, but when we take into consideration that childbirth is not precisely an infrequent occurrence, and that the total number of surgical operations performed is, after all, not very large in proportion to the population, we may see that the assertion is justified.

The anæsthetic factor cannot of course be wholly eliminated in these days in considering the etiology of the insanity. Mental disturbance has been, however, observed to follow wounds long before anæsthetics were invented. Dr. Savage has recorded a series of cases* which, to my mind, leaves little doubt that insanity may follow the administration of an anæsthetic of any kind. This paper I have already referred to. At the same time I cannot believe that in the cases in which, as so frequently happens, complete mental recovery takes place after the anæsthetic, the mania then creeping in after this distinct and lucid interval of time, that the anæsthetic has anything to do with the matter. When the mental disturbance is the direct and immediate sequel of the anæsthesia it is probably due to the

* *Op. cit.*

anæsthetic; in any case, insanity following anæsthesia is, I believe, an actual but a very infrequent occurrence.

The absorption of iodoform has by some been held responsible for the mental disturbance. I am no great believer in the efficacy of this drug as a dressing in operation wounds, and I think it was employed in only one case recorded above as occurring in my own practice.

The administration of morphia might be held accountable for the insanity produced. In none of my cases could I trace any such connection. Belladonna might give rise to an attack of insanity; so might eserine or other drugs; and so, I believe, might surgical operation.

A very important practical point is that the prognosis is most grave when acute mania occurs shortly after a serious operation, although the purely surgical aspect of the case may be favourable. Such patients are likely to die, and I should not myself hesitate to give a very bad prognosis if I saw a patient suffering from acute mania after an operation of magnitude, such as lithotomy, ovariotomy, or perhaps amputation. The more chronic the mania, the better the prognosis as far as life is concerned. I believe it will be found that in cases in which the wounds do badly, sloughing, breaking down, or showing no tendency to heal, that the mania is apt to become chronic. In ordinary insanity it is a good sign if a person gains weight and strength, and a wound is a delicate indicator of progress. When wounds do well the prognosis will be favourable, I think, as regards the mind; but it may be repeated that when the mania is acute, and the operation has been of a grave nature, the patient may die with the wound going on perfectly healthily.

It may be thought that opportunities of studying the sequelæ I have described will be but few and far between. My own distinct impression is that such cases are not nearly so rare as is commonly imagined. We are perhaps a little too apt to carry into after life the impression born in our student days that all mental disorders met with in hospital work are due to drink, and that to dub them delirium tremens is to have done with them. As a matter of fact, true delirium tremens is not so very common, while insanity due to drink primarily or principally is far less rare than might be imagined. Moreover, true delirium tremens may be but the precursor of insanity, melancholia, acute mania, or what not. For the most part the opportunities which occur in the wards of our general hospitals for the

study and teaching of mental disorders are greatly neglected, and in surgical wards at any rate the septic or aseptic condition of a wound is apt to absorb so much attention as to almost exclude the consideration of other phenomena which may occur as the sequelæ of operations.

I do not believe that such cases as I have here recorded are particularly rare, and if this paper may lead others to publish the results of their experience, the object that I have had in view in writing will be fully attained. I hope I may not be accused of falling into the error which I sought to avoid of drawing too many conclusions from imperfect data, for I feel to the full that the nail of conviction is better and more truly driven home by repeated taps of observations and facts than by a single swinging blow from the hammer of dogmatic assertion.

Reflections on the Theories of Criminality. By Rev. W. D. Morrison, H.M. Prison, Wandsworth.

Recent investigations into the origin of crime point as a rule to the conclusion that all forms and manifestations of delinquency may be traced back to the operation of three causes, which have been called anthropological, social, and cosmical.* These three causes sometimes act individually and sometimes collectively, as well as in varying proportions, according to the nature of the crime or the character of the criminal. With respect to the second cause, it is admitted by criminalists of all schools that adverse social surroundings is one of the most potent factors in the production of crime. Some writers lay down the doctrine that crime is entirely social in its origin; they adopt as their motto the celebrated maxim of Quetelet, that society prepares crime, the criminal only executes it, and maintain that an adequate amelioration of the present unequal conditions of existence would quickly bring about the extinction of the whole criminal population.†

It is not my purpose, nor is this the place, to set forth the manifold and weighty objections which can be urged against assigning an exclusively social origin to criminal phenomena. As a decisive refutation of this theory, it may be as well to point out in passing that although deplorable social surroundings operate upon great masses of the people, it is only a few

* Ferri, "Socialismo e Criminalità," 59.

† "Revue Philosophique," xxiv., 625.

of them who become criminals; and when these few are subjected to a careful examination it is found that they present a far higher percentage of bodily and mental anomalies* than the other portions of the community among whom they were accustomed to live. On the supposition that social environment alone is the source of crime, we are led to ask why it makes criminals of only the few and not of the many; and we are compelled to answer that the few have a criminal potentiality which the many fortunately have not. Now, this potentiality is in the individual; its origin springs from his physical or mental constitution. It is accordingly not immediately social; it is anthropological, and can be adequately explained only after a scientific diagnosis of the criminal. With respect to the cosmical factor in crime, all we can at present predicate is that climate, the change of seasons, and the alterations of temperature have an influence upon criminal statistics as well as on the nature of crime itself.† The diagram appended to the tenth annual report of the Prison Commissioners shows that crime reaches its maximum in this country in September and October, and descends to its minimum in January and February. Crimes of blood are more prevalent in warm climates, such as Italy, Corsica, and Spain, than in the colder regions of the north; and the further south we go the larger is the proportion of crime against "morals."‡ Of course, other causes are at work in raising or depressing these statistics besides climatic ones—such, for instance, as the hereditary characteristics of the people, their modes of life, their position in the scale of civilization, and so on; but, even after these causes have been deducted, it is difficult to resist the conclusion that climate alone counts as a factor in the production of crime.

Proceeding, then, in the conviction that the three great sources whence crime takes its rise have been discovered, the student in this department of investigation now aims at making a fresh advance. It is now his purpose to find out in what proportions the three tributaries contribute to swell the dark river of crime. This purpose, it is plain, can be effectively carried out in only one way, and that is by instituting on a large scale,§ and in a minute and comprehensive

* Garofalo, "Criminalogia" (ed. Fr.) 64 sq.
† Ferri, "Archives de l'Anthropologie Criminelle," xi., 1 sq.
‡ "Handbuch des Gefaengnisswesens," xi., 485.
§ Quetelet, "Physique Sociale," xi., 266 sq.

manner, a complete examination of each criminal individually.* We must try to ascertain what his social circumstances have been from childhood upwards and what they were at the moment of his fall. We must endeavour to know the economic conditions under which he habitually lived. By an inquiry into his parentage and relationships, we must aim at seeing what part heredity has played in the formation of his character and habits. Finally, we must study him physically, mentally, and pathologically. It is only after this exhaustive examination has been completed that we are in a position to form a true estimate of the criminal and the causes of his crime.

In recent years several Italian writers, such as Lombroso, Ferri, and Marro, have pursued this method of investigation with conspicuous success; but, as was said at the Congress of Criminal Anthropology held recently at Rome, more data are required—data collected with order, method, and uniformity of research.†

These preliminary remarks are written with a view to prepare the way for presenting the results arrived at in the examination of a criminal who was recently sentenced to death for the murder of his child.

(1) *The Murder.*—According to the evidence, W., the murderer, was a man with a wife and two little children, who lived in a lodging on the south side of the Thames. About eight months before his arrest he had little regular work, and fell into arrears of rent. Ultimately he received notice to quit. The day this notice expired—the same day the crime was committed—he was said to be the worse for drink, but not actually drunk. Part of the furniture in the lodgings was his own, and when he went in to remove it in the evening the landlady told him she must retain certain articles as security for arrears of rent. Some words passed between them, and W. left the house in a state of excitement and irritation. He had his little boy, aged about two, in his arms when he went out. A few doors off some neighbours met him, crying and agitated, and asked him what had happened. W. told them what had just occurred in the lodgings; and as he was about to leave them he addressed his child and said, "Paddy, you must be the victim." With

* Dr. Maudsley, "Journal of Mental Science" for last July.

† "Actes du Premier Congres International d'Anthropologie Criminelle," 495 sq.

these words he seized the child by the legs and dashed its brains out on the pavement. He made no attempt to escape, and was immediately arrested.

(2) *Previous History.*—W. was thirty years of age when the crime was committed. At the age of nineteen he was working as a labourer, when a strike took place which threw him out of employment. He then entered the army, and was sent out to India, where he remained two years. While in India he suffered severely from enteric fever; had relapses, was violently delirious, and, in fact, for a long time dangerously ill. After recovery he returned home, and re-entered civil life. Being in the army reserve, he had to rejoin his regiment for a short period when complications arose between England and Russia respecting the Afghan frontier. The fact that he was at this time passed by the army surgeons as fit for active service shows that he had physically recovered from the effects of the fever. While in the army he was twice sent to a military prison for insubordination.

(3) *Family History.*—W. is one of a large family. While a little lad his father died of phthisis, at the age of thirty-nine. His mother is still alive. Among his nearest relatives there are no cases on record of madness, suicide, crime, alcoholism, cretinism, or marked perversity. One of his sisters is said to suffer from a spinal ailment, and another from an affection of the heart. Some members of the family are highly emotional and of extremely nervous temperament.

(4) *Anthropological Characters.*—W. is five feet four-and-a-half inches in height; his utmost span of arms from finger-tip to finger-tip is five feet eight. He weighs one hundred and thirty-nine pounds. Of medium build, he wants the erect and well-compacted appearance which usually distinguishes an old soldier. On the contrary, the knees project, the chest is not thrown out, but crushed between the shoulders, and the arms hang loosely on the trunk. These characteristics give the figure when in a standing attitude rather a degenerate appearance, although it has also a look of muscular force. The skin of the face and body is normal; the hair, which is a shade of brown, is also normal, both in quantity and distribution. Both arms are rudely tattooed. This process was undergone at the age of twenty. On the right forearm is the representation of a sailor, and just above this rudely-formed figure are two crossed pipes and three

glasses. On the left forearm is an Irishman dancing, with a flower and bracelet above.

(5) *Craniometrical Examination.*

	Inches.
Antero-posterior diameter	7·4
Maximum transverse ditto	5·9
Antero-posterior curve (nasion to inion)	13·2
Transverse curve (tragus to tragus)	13·9
Maximum circumference	21·6
Demi-circumference, anterior	10·2
Demi-circumference, posterior	11·4
Cephalic index	79·7

Skull type, mesocephalic.

(6) *Face Measurements.*

Length of face from inter-superciliary point to superior alveolar point	3·4
Bi-zygomatic or maximum transverse facial diameter	5·4
Facial index	62·5
Forehead, height	2·4
Forehead, breadth, minimum	3·6*

The type of face is distinctly Mongolian. The inferior maxillary is massive, the nostrils are rather dilated, but neither the nose nor the chin presents any marked peculiarities. The lips are not thick, but have a tendency to protrude. The iris is brown; the eyes are small, but not sunken, and have a restless and furtive expression. The eyebrows are highly arched and slightly askew; the cheek-bones are fairly prominent; the ears and teeth are normal.

(7) *Psychological Examination.*—Professor Bain's fourfold division of mind into the senses, the intellect, the emotions, and the will has been generally adhered to in the conduct of this examination.

(A) *The Senses.*—What Dr. Bain calls the sensations of organic life, such as the feelings of pain produced by injury, the feelings of fatigue and repose, of heat and cold, of good and ill-health, etc., are normal. So also are the senses of taste, smell, touch, hearing, and sight. The appetites of sleep, hunger, thirst, exercise, and rest are likewise normal; nor does it appear that the sexual instinct has assumed any of the perverted forms mentioned by

* Compare these measurements with Lombroso's in his third edition of "L'Uomo Delinquente."

Krafft-Ebing in his *brochure* on the "Psychopathology of Sexual Life."*

(B) *The Intellect.*—The intellectual powers are rather below the average, but not a great deal. The faculty of judgment is quite up to the average, but both memory and imagination seem to be defective.

(C) *The Emotions.*—It may be stated generally that the emotions are easily aroused and strongly developed. According to the evidence, he had much affection for the murdered child. He was not without the sense of gratitude. At the time the crime was committed, and for a week or ten days afterwards, he behaved with the utmost indifference; his feelings being apparently in a state of torpor. This state of mind was succeeded by fits of remorse, which were, curiously, followed by ebullitions of high spirits, showing themselves in whistling and singing. The countenance completely changes in aspect under the influence of temper, which is easily aroused. At such times it assumes quite a demoniacal look, so much so that a person who witnessed it said he should like to have as little to do as possible with such a man. The religious sentiments were in a rudimentary state, and consisted in a vague sense of dependence on a higher Power. At the same time, certain moral elements entered into his conception of God, such as the belief that he had done a deed which merited divine punishment. But, on the whole, religious ideas seldom crossed his mind; and the fear of breaking moral laws because they were of divine origin, or of neglecting the voice of duty because it was a divine command, had no perceptible influence on his conduct.*

(D) *The Will.*—The action of the will is partly the result of inborn disposition and partly of acquired habits.† The inborn disposition, however, is the most important factor of the two; but as it does not exactly come within our purview at present, and is best discerned after the whole field of body and mind has been reviewed, I shall just now confine myself to an examination of the directions in which the will has been exercised in its twofold office as a repressing and propelling power. Speaking generally, the coercive discipline of the home, the school, the workshop, and the army must have had some effect in calling forth both the repressive and

* *Cf.* Wilhelm Wundt, Ethik., "Eine Untersuchung der Thatsachen und Gesetze des Sittlichen Lebens," 372 sq.

† Ribot, "Les Maladies de la Volonté" (1887), 4 sq.

propelling energies of the will, or, in other words, in producing a certain volume of counteracting motives to operate against the capricious play of sense, appetite, and desire. On coming to particulars, we find that the senses and the appetites, with the notable exception of the desire for strong drink, have been brought under the domination of the will. On the other hand, some of the emotions run completely wild, if one may so speak. This is particularly the case with the feelings of anger, sorrow, tenderness, and joy, which are awakened by the slightest touch, and are in a vast number of instances utterly defiant of volitional control. The will plays an important part in the formation of the moral habits of prudence and duty; but its functions have been very fitfully exercised in these two departments of conduct, which are consequently in a low and rudimentary state.

This examination concluded, we are now in a better position for forming a correct estimate of the different factors which entered into the perpetration of the crime. These factors we shall divide into active and potential, and shall proceed by a consideration of the active first.

(8) *The Active Factors.*—A sudden outburst of anger, accompanied by an overpowering desire for vengeance, were the immediate and active causes of the crime. This is clear from the words used by W. before dashing his child upon the pavement. But when we go on to ask why the criminal impulse vented itself on the child he loved, a psychological question of no small complexity at once presents itself. Surely the landlady who had turned him out and provoked his passion was, if anyone, the proper object of his revenge. When this fact was pointed out to W., with a view to get him to give a reason for the crime, he said he could not remember having committed it at all, although he knew he must have done so. If this answer be true, and whether it be correct or not, it offers a clue of some kind to the operations of the mind at the time the crime was perpetrated, W.'s would then be a case in which passion rose to such an extraordinary pitch as not only to dethrone the reason, but also to extinguish the affections and obliterate the memory as well. All the resisting motives being thus swept away, the blind tempest of fury was able to do its work unchecked. As a support of this explanation, which is only brought forward tentatively, it may be urged that anger often vents itself upon objects that had nothing to do with producing

it.* Such manifestations of anger are habitual in all cases where the mind is in a humble state of development, as, for instance, among children and savages. Witness the case of children who find a relief to passion in kicking violently on the floor or in smashing their toys or destroying any object which happens to be at hand. It is precisely the same with savages, who often appease enraged feeling by killing and wounding the first person they may chance to meet. Even men of moral and intellectual attainments sometimes descend to equally irrational actions when under the sway of rage; as, for example, banging doors, stamping with the feet, or dashing on the floor whatever may at the moment be in the hands. W.'s case only differs in degree from these insane exhibitions last mentioned. But this difference of degree is most important, and can be elucidated only by reference to the potential factors which entered into and augmented the murderous impulse till it rose to the pitch of action.

(9) *The Potential Factors.*—The potential factors which accentuated the murderous impulse were of two kinds, individual and economical—the one residing within the organism, the other proceeding in part from the structure of society and in part from the operations of external nature. Among the factors inherent in the organism, and which may be called hereditary and congenital, are descent from a consumptive parent and membership of a family with a predisposition to neurosis. To these we must add the pathological factors, consisting in drunken habits, and the after effects of enteric fever. Then come as manifestations of degeneracy such physical traits as abnormal shortness of stature, an abnormal length of arms, a huge under jaw, and a Mongolian type of face. I hesitate to draw any conclusions from the head-measurements, as the craniometrical department of criminal anthropology requires additional facts before we can proceed to safe deductions.† Skin decorations are usually looked upon as a sign of atavism; if this be so, we find tokens of an atavistic character in W.'s tattooed arms. The psychological examination revealed a defective memory, a passionate temper, an unstable will, and a comparative absence of moral habits. The most important potential factor external to the individual organism was

* Lombroso mentions the case of a man who, on being insulted at night by some unknown persons, armed himself, and went about wounding anyone he happened to meet.

† Férè, "Dégénérescence et Criminalité" (1888), 71 sq.

economic, and consisted in want of work. Want of work in this instance had its cause partly in the unsteady habits of W., partly, no doubt, in the imperfect structure of society, and partly in the sterility of the seasons. Anyhow, want of work brought W. to the severest straits of poverty, reduced his ordinary standard of living, and probably set up a morbid condition both of body and mind. In these circumstances it is natural to infer that the criminal potentialities of W.'s constitution would be considerably increased, whilst his power of combating them would be correspondingly weakened. At this critical juncture one of these potentialities — the tendency to anger — is roused into action by the quarrel with his landlady, and the hidden forces behind it are so powerful that opposing motives cannot assert themselves, and an unnatural crime is the result.

If this analysis of W.'s conduct is in the main correct, the crime for which he was condemned ceases to be a mystery, and takes its place under the great category of actions regulated by the immutable law of cause and effect. Stated in general terms, this case of murder is the result of adverse social circumstances acting on a criminally-constituted organism, and the crime would not have been effected unless both these factors had been present. The circumstances alone or the organism alone would not have sufficed to produce the deed; it required a combination of both. Similar circumstances acting on a normal organization would have been comparatively harmless; and, on the other hand, a similar organization living under more favourable conditions might never have descended to the more atrocious forms of crime. Finally, these observations force on the conclusion that in such cases as the present repression of the severest nature is a good only in so far as it prevents the criminal from propagating his kind; it does not, however, touch the causes of crime, and this is why repression is a failure. These causes, we have seen, are social and physical; repression cannot affect them; they must be examined and dealt with by the statesman and the anthropologist. It is the task of the former, aided by the philanthropist, to so ameliorate the social conditions of existence as to deprive crime of its roots in society; it is the duty of the second to thoroughly investigate the physical and mental causes of crime, and to inquire how far they admit of remedy. This inquiry and this investigation are as yet in their infancy;

but an impulse has been given to them, and what is now wanted is a greater mass of carefully-authenticated facts. These are the only materials that science can work upon; and whoever assists in the work of collecting them may rest assured that they will be of service, not only to the interests of knowledge, but also to the higher well-being of mankind.

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*Muscular Movements in Man, and their Evolution in the Infant: A Study of Movement in Man, and its Evolution, together with Inferences as to the Properties of Nerve-Centres and their Modes of Action in expressing Thought.** By Francis Warner, M.D., F.R.C.P., Physician to the London Hospital, and Lecturer on Botany in the London Hospital Medical College.

Section I.—Study of Movements in Man.

(1) Movement in man has long been a subject of profitable study. Visible movement in the body is produced by muscular contraction following upon stimulation of the muscles by efferent currents passing from the central nerve-system. Modern physiological experiments have demonstrated that when a special brain-area discharges nerve-currents, these are followed by certain visible movements or contraction of certain muscles corresponding. So exact are such reactions, as obtained by experiment upon the brain-areas, that movements similar to those produced by experimental excitation of a certain brain-area may be taken as evidence of action in that area, or as commencing in discharge from that area (see Reinforcement of Movements, 35; Compound Series of Movements, 34).

(2) *As to methods of observing and recording movements.*—Movements are the visible signs of action in certain brain-areas corresponding, they are also the data for the study of brain-action. Most of the observations to be given are the result of simple visual observation noted down when seen; in some cases a graphic method of recording movements has been used (see "Journal of Physiology," Vol. iv., No. 2, and Vol. vii., No. 4).

It is also desirable to record the time of the antecedents of the movement seen, and for this purpose the graphic method

* Paper read before the Royal Society, June 21st, 1888.

is very useful; the sequences and concomitants of the movement should also be noted.

(3) *Attributes of a movement.*—A movement as produced by a nerve-centre has but two intrinsic attributes, Time and Quantity. We may note the sequence of the movement (see 27) as well as its necessary antecedent (see 26), the relation of the time of the antecedent to the time of the sequence, and also the ratio of the quantity of the antecedent stimulus to the quantity of the force of the movement resulting (see 34, 35). Many of the special characters of the movement depend upon its relations to the antecedents, its relations to the sequence, or upon the surroundings of the subject observed.

(4) *Static action in nerve-centres.*—A movement is a sequence and index of efferent nerve-currents. Efferent currents from two or more centres to the muscles may for a time be uniform, in which case we observe their ratios as indicated by the postures resulting.

(5) *Time of a movement.*—We may observe the time, duration, and frequency of a movement. In observing movement of two or more parts we note the combinations, and series of acts. The time of each separate movement determines a special combination and the order of the series of combinations that occur.

(6) *Quantity of a motor action.*—The quantity of motor action is in part observed by noting the frequency of repetition, and the mechanical work done by the movement. It may also in part be described in terms indicating ratios of motor static action as seen in the postures resulting.

(7) *Postures.*—Postures depend upon the ratios of nerve-muscular action, and to some extent they indicate the present ratios of static efferent force proceeding from the centres concerned. Observations show that the postures, when not due to a present stimulus, or when produced by a weak stimulus from without, such as a sound or sight, correspond to and are signs of the general condition of the central nerve-system (see Signs of Fatigue, 38).

Alteration of postures is the same thing as movement. Movement is due to alteration in the ratio of action in the centres. The ratio in equilibrio produces postures.

(8) *Parts of the body.*—In order to describe movement in the body, it is necessary to note and define the part or parts moving, the direction of the movement, and also its time and its quantity. In proceeding to speak of some parts of the

body that can move separately, the more important facts observed as to their movements and postures will be indicated. The following points are mentioned as having specially attracted my attention in recording observations, and are such as appear to be of physiological importance.

(9) *The upper extremity.*—In the upper extremity, the shoulder, elbow, and wrist have the movements described by the anatomist; in making observations, the relative extension of the shoulder, pronation, adduction of the wrist, etc., on either side of the body, can easily be observed and noted.

(10) *The hand.*—In the hand, the metacarpal bones are capable of position all in the same plane, that for the thumb can be separated from the others or approximated to them. All these bones may be approximated so as to contract the metacarpus, as when the hand is made into a cone. The fingers may be flexed at each joint, and extension backwards may occur at the metacarpo-phalangeal joints to a varying angle, greater in children than in adults. The fingers can also move at their junction with the metacarpus, in a lateral direction. It may be noted as an anatomical fact that these lateral movements of the fingers are performed by small muscles, the interossei, while flexion and extension are performed by larger muscles in the fore-arm. Contraction of the metacarpus results from action of the small muscles of the thenar and hypo-thenar groups.

Experience has shown that the following movements, and ratios of action, indicate special conditions or brain-states.

(11) *Metacarpus straight.*—All the bones of the metacarpus may be in the same plane; this appears to be the normal when the hand is held out on request.

(12) *Metacarpus contracted.*—In certain cases the metacarpal bones are approximated, as when the hand is made into a cone. As far as I know, Trousseau, in his article on "Tetany," first pointed out the significance of this posture as a pathological sign.

(13) *Over-extension of knuckles.*—In the normal, the digits are not extended back beyond the plane of the corresponding metacarpal bones, but such over-extension may occur and is commonly associated with lateral movement of the digits. Both this posture and these movements probably result from action of the interossei.

(14) *Anatomical mechanism of the hand.*—Professor Marshall drew my attention to the following fact, which is important as to the significance of certain hand-postures.

Let the forearm be examined when its muscles are all relaxed, the limb resting on a table and the hand hanging free beyond its margin. When supine, the hand falls into extension and the fingers are passively flexed, owing to the mechanical effect of dragging the flexor tendons over the carpus in that position.

(15) *The head.*—Movements and postures of the head may be defined by speaking of flexion, extension, inclination to right or left, and rotation to the right or left; other movements and positions are described by compounding these terms. Head-flexion and extension are its only symmetrical movements and postures, *i.e.*, the only actions due to equal and synchronous action of the corresponding centres on the two sides of the brain.

(16) *The spine.*—The movements and postures of the spine have often been defined. Lateral curvatures and lordosis appear to me specially important, and perhaps are signs of equal value.

(17) *The face.**—The face is so mobile in its parts, its movements and balances of muscular action are so important, that it is convenient to examine each side separately, and then divide it into three horizontal zones, the "frontal" above the level of the orbits, and the "middle," which is divided from the "lower" zone by a horizontal line at the level of the lower margin of the orbits. The two sides of the face usually act at the same time, and in equal degree in each part respectively. The more common asymmetrical movements are in one orbicular muscle of the eyelids—at one angle of the mouth—or contraction of one levator labii superioris alæque nasi, uncovering the canine tooth. The separate mobile features, or facial areas, may act with a certain degree of independence. Slight variations of muscular action may be indicated by slight alterations in the tension of the skin in various parts. In the frontal region it is often useful to use the strong light of a condenser, screening the eyes, and employing a magnifying lens so as to observe slight alterations in the markings on the skin. The muscles of the face generally may be toneless, and void of any spontaneous movements; in extreme conditions the features may fall somewhat, allowing the face to become elongated (see Signs of Fatigue, 38). The tone of the orbicular muscles is in all cases specially worthy of notice.

* See Author's "The Children, how to Study them." Section IV. F. Hodgson, Farringdon Street.

(18) *Movements of the eyes.*—Under ordinary circumstances the axes of the eye-balls remain parallel to one another in their various movements except upon near vision, when the axes converge and the pupils contract.

(19) *Eyes in coma.*—Under chloroform, in deep alcoholism, and in the deep sleep of infants, this is not so. Then the pupils are minutely contracted and the eyes move, though no other movements are seen in the body but those of respiration; such movements are slow in either eye and quite independent of one another—one eye may be temporarily stationary while the other moves, or they may move in different directions and at different pace.

The greater number of ordinary movements of the eyes are in the horizontal plane of the orbits. Movements of the eyes may be so frequent that they are never at rest; many such movements are not controlled by sight and are usually horizontal in direction. Eye-movements are usually controlled by sight, by sound, and by touch of any part of the body. Movements of the eyes in their orbits may occur without movements of the head. In the adult it is most commonly so, but in young children I think the head and eyes are more frequently moved together. It is much less common for the head to move in one direction and the eyes in the opposite. Dr. Gowers has pointed out some interesting facts with regard to movements of the eyes ("Med. Chi. Trans.," 1879).

(20) *The jaw.*—The muscles of mastication may be relaxed, allowing the jaw to droop and thus elongate the face (see Fatigue, 38). Occasionally, following upon some impression of sight or sound, the muscles contract spasmodically, producing lateral movements of the closed jaws and tooth-grinding. More commonly such action takes place during sleep; such movements, occurring without any immediate impression from without the body, are perhaps the most common spontaneous movements which occur during sleep, except those of the eyeballs already described (see 19). As to what is here meant by "spontaneous movements," see 28.

(21) *Small parts.*—In describing visible movements, it is necessary to note separately movements of small and large parts, or rather movements effected by small muscles as contrasted with those produced by larger muscles. The intrinsic muscles of the hand, the muscles of the eyes, the face, the tongue, and larynx, are here classed among the small muscles. The interossei, whether in the static condition producing over-extension of the metacarpo-phalangeal

joints, or when producing lateral movements of the fingers, may be contrasted with the long flexor muscles; again, the muscles of the thenar and hypo-thenar eminences in contracting the metacarpus may be contrasted with the larger extensors which straighten it transversely.

(22) *Respiratory movements.*—In observing the groups of movements which produce respiration it is usual to find that they are symmetrical on the two sides. The movements of the sternum and epigastrium should be separately recorded. The rhythm of the movements, or character of the series of acts, is usually regular or similar in each act, that is, if not altered by an impression received from without. It has been said that the respiratory movements are usually a regular succession of similar acts, but no set of movements is more liable to alteration of its rhythm than are those of respiration. Sight and sound may readily alter the component movements of the respiratory action.

(23) *Identical and similar movements.*—If on two or more occasions there be movements of the same part of the body, the action being alike in direction, in time, and in quantity on each occasion, then the two series of movements are identical. Identity of movements is thus defined as dependent upon intrinsic attributes, not upon relations to the sequences or antecedents. If the analogy is less perfect, movements may be called similar, though not identical.

(24) *Identical and similar postures.*—If in similar parts corresponding joints are equally flexed, extended, etc., then the postures are identical. If in each limb, compared as to postures, corresponding joints are flexed, extended, etc., but not in equal degree, then the postures are similar, but not identical. Thus, when the two upper extremities are held out at request, the left shoulder may be less extended than the right, making an angle of 25 degrees below the horizontal, while on the right side the shoulder is more extended, the humerus being only 10 degrees from the horizontal. The wrist, again, may be more flexed on the left side, and the metacarpo-phalangeal joint, and the internodes of the thumb, may be more extended on the left than on the right. Such ratios of action are common, and such relative postures on the two sides are similar, but not quite identical.

(25) *Asymmetrical postures.*—Asymmetrical postures indicate unequal ratios of action in corresponding centres on the two sides of the brain, hence flexion and extension of the head and spine are their only symmetrical movements or

postures. Rotation and inclination of the head are not symmetrical postures.

(26) *Antecedents of movements.*—Certain movements frequently follow upon a sound or special sight with great uniformity. They may also follow impressions received from any of the organs of sense or any other parts of the body. Sound or sight may be followed by head-rotation, flexion, or extension, but it appears that sight less frequently causes inclination as an immediate sequence. This is more often due to some general condition of the brain-state (see 38), or to previous impressions received. Sight and sound are not known as the usual immediate antecedents of the frequent posture—"wrist-flexion with over-tension of the metacarpo-phalangeal joints." On the contrary such stimuli may be followed by extension of the wrist, with or without extension of the digits. Sight or sound will not often appear as immediate antecedents of a hand-posture, "all parts flexed with contraction of the metacarpus." Such states of balance appear to depend upon the average condition of the nerve-system, not upon immediate stimulation through the senses. Restless movements of the eyes are due to a want of control of the nerve-centres by surrounding objects.

(27) *Sequence of movements.*—The sequence of certain movements may be very complex, although the movement itself is a simple phenomenon. Given the antecedents we note the sequence. If we use certain stimuli experimentally, as in testing knee-jerk, we observe the sequence as a movement. So if light be allowed suddenly to fall upon the eye we observe the sequential contraction of the pupil.

A muscular movement is always itself a physiological fact, the outcome of nerve-action. The sequence of the movement may not be a physiological fact, but a mechanical one, as lifting a weight or writing.

The terms employed to express the results of movement are almost innumerable, and the supposed antecedents, or causes of actions, are almost as many. The physiologist need do no more than record visible facts and his methods of observation. He may subsequently draw inferences from his observed facts, or look to the relations of his facts. This I shall do in Section III.

(28) *Spontaneous movements.*—Movements are often observed without any known circumstance stimulating them. Examples will be given further on, especially in the cases of young infants (see 42). Probably in all cases such move-

ments, if not really excited by surrounding forces acting at the time, are due to previous impressions received by the individual or inherited by him.

(29) *Controllability of movements.*—Observations on the antecedents of actions show that movements may be controlled as to their time and quantity by physical forces acting from without. If such forces control the time of action of the movements they necessarily determine the combinations and series of movements (see Impressionability, 69.)

(30) *Parts free and disengaged.*—It may be found that some stimulus, such as the sight of an object or light, is acting strongly upon a man, and that his movements and postures, or balances of action, are controlled thereby. Observation may further show that the movements and postures are not then readily altered by such other stimulus as sound. If the stimulus of sight be withdrawn, then the sound may control both movements and postures. In a case where stimulation by sight is less strong the sound may act more readily (see 71).

(31) *Movements indicating retentiveness.*—Retentiveness as a property of nerve-centres may be indicated by the movements following from sight. In an individual we may observe a similar series of movements (see 23) follow a certain stimulus on successive occasions. This may be the case when the experiment is repeated at long intervals (see 50, 65, 72).

(32) *Movements indicating delayed expression.*—Series of movements may be observed to follow a long time after some stimulation which was their necessary antecedent. The impression made at one time may not be immediately followed by any visible outcome. The outcome may be long delayed; it may not be visible till certain forces again act upon the subject (see 73).

(33) *Movements indicating double action in nerve-centres.*—It is common to find evidence that an impression received is followed by two results—(a) a movement immediately following the impression; (b) a delayed result, indicated by a subsequent series of movements (see 74).

(34) *Compound series of movements.*—As to the relation of an observed series of movements to its necessary antecedent, it is very common to see a long series of movements, involving many parts, follow upon some slight stimulus, such as the sound of some word of command, or even a gesture seen

in another person. The compound series of movements does not necessarily terminate in a strong act, but in one, as it is commonly said, well adapted to the circumstance. In all such cases, however, it will be found that impressions have been made upon the brain antecedent to the slight stimulus which immediately started the series of actions observed. Such compound action may be in part an example of delayed expression (see 32), or of previous impressions upon the brain, and in part a reinforcement (see 35). Such cases of "compound series of movements" do not occur in the infant at birth, or in very early life (see 43). The cerebral arrangements for such actions must be built up (see 52).

(35) *Reinforcement of movements*—A series of movements may occur sequential to some stimulus, in which the final movement is much stronger than would be expected from the force of the primary stimulus, each group of movements as the series progresses increasing in number and in force. It is the spreading area of movement, or the increasing number of parts moving as the action proceeds, that is here specially indicated, such augmenting series of movements being started by a very slight stimulus. The force expended in such series is out of all proportion to the strength of the original stimulus. The sound of a sharp word to a child may be followed by depression of the angles of the mouth, alternate tonic contraction and relaxation of the orbiculares oculi, altered respiratory movements causing screaming, flushing of the face, and finally clonic contractions in various muscles spreading over the body.

(36) *Movements indicating general conditions of nerve-centres.** —To illustrate what has been said concerning the study of movements, descriptions of certain properties, modes of action, and general conditions of the nerve-system may be given in terms implying movements. Conditions may be indicated by observations as to—(a) *static states* by postures, which are due to ratios of action; (b) *dynamic states* by movements, namely, such as occur upon special stimulation by light, sound, touch, etc., or by reflex movements directly stimulated by impressions made upon certain parts of the body and its surface.

(37) *Movements indicating similar conditions of centres.*— If two individuals do not present similar movements following upon similar stimulation (see 23), we infer that the con-

* See Author's "Physical Expression," Chap. XIII, International Scientific Series.

dition of their centres is not similar. Thus the sight of an object may be followed in one man by the head and eyes turning towards it, while in another man they may turn away from it.*

(38) *Signs of fatigue.*—After ten hours' work a man may present the following signs:—The force expended in movement is small in amount, and the total number of movements is lessened. A certain number of movements may occur not directly stimulated through the senses, and they may not be like the movements ordinarily seen in the man (see Similar Movements, 23). Thus the eyes may move horizontally uncontrolled by sight or sound, the fingers may move in flexion or extension, or laterally without effecting any mechanical work; one digit or many may thus move. Under stimulation the movements are not the normal, the eyes are not moved by sight of familiar objects, the head may not move to familiar sounds, speech is not readily stimulated by the sound of familiar words. The head is more readily flexed under the influence of gravity; the knee-jerk phenomenon is less easily elicited (see papers by Dr. Lombard, "American Journal of Psychology," November, 1887). Further, the head and eyes may turn away from familiar sights and sounds, an action antithetical to the normal. These reflex actions may be excessive, especially to sharp and sudden noises, or to touch, and compound motor action (see 34) may be either almost absent or different from the normal, as indicated by the movements.

As to the postures in such condition. The postures as well as the movements are often asymmetrical (see 25); the head may be slightly rotated and inclined to one or other side, the shoulders unequal in level, the spine bent to one or other side, and too much bent forward when standing. If the hands are held out they are not on the same level; the wrist is slightly flexed, the fingers partially flexed, the metacarpus somewhat contracted (see 12), or, at least, the thumb is drooped.† This hand-posture is usually seen on either side, but may be more marked on the left (see 25). The face may be slightly elongated and the lower jaw slightly drooped from muscular relaxation, while the loss of tone in the orbicular muscles of the eyelids produces fulness or bagginess

* See Author's "Physical Expression," Chap. XIII, International Scientific Series.

† See Author's "Anatomy of Movement." Kegan Paul & Co. Postures are there classified and named.

about the lower lids. The mouth also may be partially open.

(39) *Sleep.*—We may further observe this individual, and note as follows:—Darkness and quietness are circumstances under which movement may not occur in the limbs while the eyelids close, but the respiratory movements continue. Certain movements, not controlled by present circumstances, may occasionally occur in the limbs and fingers. The orbicular muscles of the eyelids predominate over the elevators, so that the eyeballs are covered. The jaw often falls slightly, the orbicular muscle of the mouth is usually relaxed, and the mouth partially open.

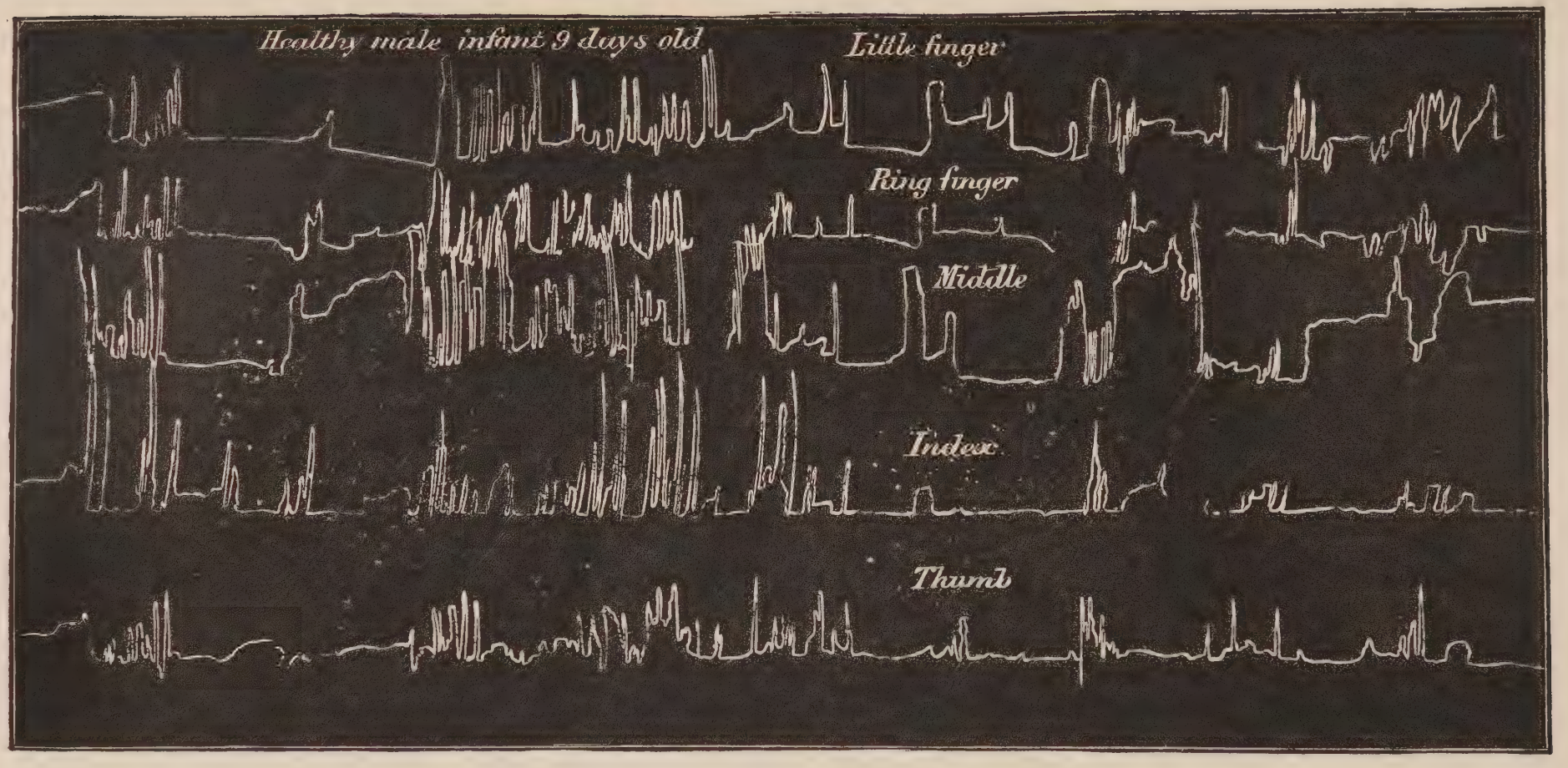
Section II.—The Evolution of Visible Movement in Man.

(40) *Microkinesis.*—Common observation affords abundant evidence that the various members, and parts, of a healthy infant present constant movement while it is awake. The same thing may be demonstrated by use of the graphic method. These phenomena appear to be of great physiological importance, and as their history, their meaning, and their analogy have not hitherto been fully discussed, I propose to describe this class of movement under the term microkinesis.

(41) *At birth.*—In the infant respiratory movements are established at birth, and continue without interruption. The child cries (see 35) when the skin is wet or cold, and when food has been withheld more than two hours. Contact of an object with the mucous membrane of the lips stimulates the movements of sucking. Cold to the skin is followed by crying, light causes closure of the eye-lids, and if the eye-lids be raised the pupils contract to light. The tone of the sphincter apparatus enables the hollow viscera to retain their contents for a short time. In an infant a few hours' old, the attempt to straighten the elbow when flexed may be strongly resisted.

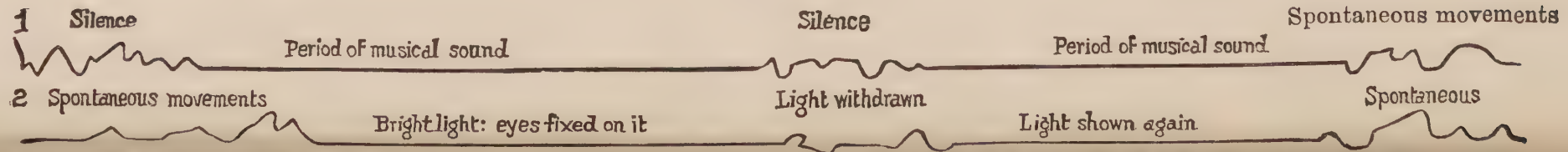
(42) *Movements of microkinesis.*—When the infant is awake spontaneous movements (see 28) may be seen in the limbs, especially in the digits or small parts; they are slower than most of the movements of adults, and are almost constant. They occur in no apparent order, but appear to be quite irregular. A short period of wakefulness is usually followed by sleep, indicated by subsidence of all movements except those of respiration and closure of the eye-lids.

FIG. 1.



Tracings of the spontaneous movements of an infant's hand during fifteen minutes.

FIG. 2.



movements of an infant were inhibited by sound, and again by a strong light.

(43) *Movements controlled.*—These movements, in the newborn infant, are not controlled through the senses by sight or sound. However, movements of respiration and deglutition are controlled by impressions upon the skin and mucous membrane. At this early stage we do not observe the phenomena of delayed expression (see 32), compound cerebration (see 34), or cerebral inhibition (see 49), but reinforcement of movements appears in the act of crying (see 35).

(44) *Movements of eyes.*—The eye-movements usually maintain parallelism of their axes, but if the organization of the infant is feeble the eyes, as they move, do not maintain a strict parallelism of their axes (see 19). This is most commonly observable when the child is sucking its bottle.

(45) *No signs of mental action.*—It is commonly said that the infant at birth does not give expression to the faculties of mind, because it does not present signs showing that its nerve-centres are impressed, even temporarily, by the sight of surrounding objects; its hands do not move towards objects within the field of vision, and none of its movements indicate that they are controlled by sight or sound.

(46) *At one month.*—Following up our observations through the early weeks of infant life it seems that movements in the face appear first about the mouth, later in the forehead. The limbs are moved with more force, they move through a greater amplitude, and may begin to effect some mechanical results. An object placed in the hands is followed by closure of the fingers, and movements of the elbow may result in the object being carried to the mouth, but soon microkinesis returns in the parts and the object is dropped.

(47) *At three months.*—When about three months old some control of movements through the senses may be observed, and the head may move towards a bright light. Still we do not see the hand move straight towards an object within the field of vision, and when a part of the body is irritated the hand does not move towards it; there is not much capacity for compound cerebration (see 34). I have known a child in whom one leg was irritated, and the hand was not moved to scratch it, but the other leg moved up and did so with the foot. The associated movements of the hands, in such an act as transferring an object from one hand to the other, is not acquired for some months (see Compound Movements, 34). The microkinesis still continues, and when the muscles are strong enough to hold up the head, spontaneous movements of this part as well as of the eyes are

seen. The ever-changing expression of children's faces appears to belong to the same class of movements. In the earliest stages microkinesis produces very little effect upon objects around; it does not supply the child with food or minister to its necessities.

(48) *At four months.*—When the infant is about four months old we find commencing signs of impressionability to stimulation through the senses, the sight of objects, and sounds around begin to control the microkinesis (see 39). Here is a tracing from an infant about four months old; the microkinesis was temporarily inhibited both by sight and by sound.*

(49) *Inhibition.*—A little later in the history of the cerebral evolution of the infant the sight of an object may not only inhibit the microkinesis, but this may be followed by turning of the head, the eyes, and the hands, towards the source of the light or sound (see Compound Movements, 34, and Reinforcement of Movements, 35). Sometimes the sight is followed by rotation of the head towards the light, then cessation of all movement occurs, shortly followed in its turn by much general movement in the parts of the body. At this stage of development we find that any control of movements by direct stimulation is followed at once by its visible expression (there is no delayed expression, see 32).

(50) *Retentiveness.*—The movements which indicate recollection of names (Retentiveness, 31) are very important; the word is heard and the special movement follows.

(51) *Eye-movements.*—Upward rotation of the eyes, with elevation of the upper lids, and movements of the eyes in their orbits, appear to be later developments than movements of the head.

(52) *At three years.*—At three years old the conditions are markedly changed; many examples of delayed expression and compound cerebration, with or without nerve-reinforcements, may be seen. Microkinesis continues, but it is much more under control through the senses; retentiveness in the centres is illustrated by recurrence of similar actions upon similar stimulation. Actions in other people are now imitated (see 66).

(53) *At ten years old.*—At ten years old but little microkinesis is seen; we see prolonged periods of cerebral inhibition followed by well-marked signs of retentiveness, delayed

* See Fig. 2.

expression, and compound cerebration, the whole being well under command of circumstances.

(54) *The infants' movements.*—The infant at the earliest ages does not show actual signs of mental action; it does not walk or talk, or turn its head and eyes towards objects. Its movements are not modified in any marked degree by the action of light or sound. The infant's brain is in some respects less impressionable than that of the adult, and the impressions are less permanent. During the early months of infant life the signs of brain development are identical with the signs of mental development. Compare the action seen at birth with that seen at five months. Microkinesis still continues, but is capable of control by stimulation through the senses. It may be arrested temporarily by sight or sound, and this, after many repetitions, may be followed by new series of movements occurring upon less and less stimulation, and with increasing quickness and accuracy as time goes on. We infer a corresponding change in the nerve-centres. It appears that at birth they act slowly and independently of one another—as far as we know without any order in their acting—and the time of their action is not determined through the senses. At the age of four months they may be temporarily suspended from action by external stimulation (see 48), and during the time when no efferent currents are passing from them they undergo a change indicated subsequently by special combinations and series of movements (see 65). This appears a great advance in cerebral evolution.

(55) *Kinds of movement seen in infants and children.*—The following kinds of movements may be seen in the infant:—Movements, the outcome of inherited conditions in the nerve-system (microkinesis, see 46); movements following immediately upon stimulation by certain external agencies, as light, sound, etc.; movements resulting from the acquired association of nerve-centres (see 65); movements similar to those previously resulting from a similar cause (see 23); movements in different special areas, such as the small joints in contrast with large joints; asymmetry or symmetry of parts, etc. Action indicating delayed expression (see 32).

(56) *Evolution in nerve-centres.*—We may proceed to consider the evolution of visible movements of the infant as signs of the modes of action of its nerve-centres.

(57) *The infant brain.*—It appears that at birth separate nerve-centres act spontaneously and almost constantly,

except in sleep, and that such action is not controlled by external forces. Certain centres may, however, affect the respiratory centres, and nerve-currents may spread to the centres which produce the movements of crying (see Reinforcements).

Later, impressionability of centres through the senses appears (see 47), and series of movements may be thereby controlled, indicating the spread of nerve-currents among the nerve-cells in a certain order of succession. In advancing stages spontaneous action of centres may be inhibited (see 49), no currents for the time passing to the muscles, and after many such impressions we may see that certain groups of centres tend to act in a certain order (see 65). Retentiveness of impressions is found to exist, and at times an impression may be made and retained with or without coincident visible movement (see Delayed Expression, 32). Among later developments we see evidence that the centres acting in the child are those corresponding to the centres in action in a person speaking to him (see Drilling Lesson, 66).

(58) *Significance of microkinesis.*—Spontaneous movements thus universal at birth must have some important signification. Again, such movements at the earliest ages after birth do not appear, by their sequence, to produce any direct effect upon the body of the infant; they do not assist to supply it with food or minister to its necessities. I here speak of the sequence of the movements of parts, not of the effect of action in the centres.

To understand the significance and analogies of microkinesis it is necessary to look not only to the movements seen, but to the action occurring in the nerve-centres which produce them.

Each movement corresponds to action in a nerve-centre; the mass of movements corresponds to a mass of nerve-centres in action. Further, these movements, as far as we can see, as to their time and the parts moving, are not determined by forces around, that is to say, the nerve-centres are not controlled in their attributes of action as to time by external stimuli acting through the senses (see 43). We conclude that in the infant, in its earliest stages, the nerve-centres act separately and independent of special stimulation.

(59) *Microkinesis: Its corresponding brain action.*—If we want to determine the significance and purposes fulfilled by special phenomena in man, it seems to me that we must

proceed to look at analogous phenomena in other living things.

(60) *Microkinesis in animals.*—In most animals movements are seen in much greater number in the young than in older members. In the lowest groups free swimmers often become fixed in later life; they lose the power of locomotion.

(61) *Microkinesis analogous to circumnutation in plants.*—Charles Darwin* has shown that circumnutation of the young growing parts of plants is almost a universal law. This circumnutation is due to unequal but regular growth in the cells of bilateral structures, the cells not growing uniformly, but first in one place, then in another, the movements following as a mechanical result.

Microkinesis in infants may be the representative of the movement seen in other young and growing creatures.

In making analogy between the visible modes of movement called microkinesis and circumnutation I do not wish to compare the child and the seedling, but the modes of action in the nerve-centres of the infant brain and in the cells of the seedling plant. In each case it appears that in the early stages of evolution of the individual small groups of cells tend to spontaneous action. There appears to be this difference between the two in the earliest manifestations, that whereas in the seedling plant circumnutation in the earliest stages of germination is controllable by light and gravity, microkinesis is not at birth obviously controlled by forces around. The characters of microkinesis at four months old more exactly correspond to circumnutation than those seen at birth.

If there be this much analogy between the action termed circumnutation and microkinesis, what about the subsequent history of each?

We may try and give a brief description of the significance of this condition in young growing things, and trace its history as evolution of the individual proceeds, showing the history of microkinesis up to its disappearance, when it is replaced by movements controlled by impressions, etc. These properties of brain, as they appear, are the properties which impart to the organism the faculty for the expression of intelligence and thought.

(62) *Outcome of microkinesis in the infant.*—The modes of action termed microkinesis are shown to be replaced by the

* "Movements of Plants," Charles Darwin.

signs of impressionability, retentiveness, inhibition, compound cerebration, delayed expression, double action, and imitation.

(63) *Outcome of circumnutation in the plant.*—Circumnutation as a mode of action is replaced by geotropism, heliotropism, and those special actions in plants which are the most like the intelligent movements of man.

(64) *As to phenomena following subsidence of movement.*—One of the most interesting phenomena that came under my observation in studying movement in infants was the gradual appearance of the faculty for cerebral inhibition (see 48).

Examples may be given where the incidence of light and sound were followed by special series of movements. Inferences as to coincident action in the brain-centres will be given in Section III. (see 79). Two examples must suffice. The movements seen in an infant have been referred to and partially described. Certain movements may be observed as constant during an hour or more. When a red box is held within the field of vision movements stop; when the red box is removed they recur as before.* Clearly, then, the red light reflected from the box was a part of the antecedent of the arrest of movement. Sound, likewise, as produced by a musical box, was followed by arrest of movement (see 48). It will be our concern presently (in Section III.) to study what occurs in the brain during the period of no visible movement.

(65) *Memory.*—We may next observe a child that has had its movements arrested in similar manner by the red box and the musical box on fifty successive days. It is now seen that on presentation of the red box within its field of vision certain combinations and series of movements occur in its hands and face. The fingers open, the movements of shoulders and elbows are such that its hands are carried towards the box, and if this be near enough it is grasped.

An analogous example may be taken among older children. Those in the observation I am about to describe varied from seven to thirteen years of age. Observing about forty children during a drilling lesson I saw the first, second, and third divisions go through the same exercises to the same words of command and took notes.

(66) *Imitation.*—While the children stood motionless in rows in front of the teacher she performed the exercise and

* See Fig. 2.

spoke quietly to the children; then, following the word of command, similar combinations and series of movements were seen in the children. The first division had been similarly drilled about fifty times, the second division thirty times, and the third division only twenty times. In the first division the exercises followed in the detailed series of movements with great uniformity, exact in the time and quantity of action in each part. The word of command was in each child followed quickly and uniformly by the particular series of movements called for. Movements were less exact in the second class. In the third division the movements following the words of command were very uncertain, and varied in the different children.

In teaching the class, the spontaneous movements of the children are arrested as the centres are impressed by the sight of the teacher's movements. After this period of inhibition the children perform series of actions similar to those previously seen in the teacher. It appears that during the period of arrest of all movements the centres were being prepared to perform these special series of movements.

Section III.—Nerve-Centres, their Properties and Modes of Action.

Sections I. and II. were mainly devoted to indicating the kind of observations upon which the views now to be put forward are founded. Facts observed have been defined, classified, and in part explained. Indeed, very little more has been attempted than a description of physical facts, scrupulous care being taken to avoid using any metaphysical terms in such descriptions.

(67) *Terms of descriptions.*—Paragraphs are labelled in some instances with the ordinary name of the condition observed. It is one thing, for the sake of convenience and brevity, to employ such terms in place of description by physical terms; it is another thing to give descriptions which do not connote the facts seen. Physical terms are such as connote what we may observe. Physical science can deal with physical facts, and in many cases give useful explanations concerning them. Hypothesis founded upon facts often guides future observations, thus leading to useful results.

(68) *Properties of nerve-centres and their modes of action.*—Following upon the preceding characters of movements we may draw inferences as to properties and modes of action in nerve-centres.

(69) *Impressionability.*—Impressionability is a main characteristic of nerve-centres. It is opposed to spontaneity, in which condition the centres appear to be but little under control of impressions received through the organs of sense (see 28).

In certain cases, as in the drilling lesson described (see 66), the series of actions in the observer are similar (see 23) to those of the individual observed (see 29).

(70) *Imitation.*—Here it appears that the sight of certain movements in another individual is followed in the observer by action in the nerve-centres which correspond to those whose action in the man observed produced the visible movements imitated (see 66).

(71) *Nerve-centres free.*—Nerve-centres, when only slightly stimulated, appear more impressionable than when under the influence of a strong stimulus (see 30).

(72) *Retentiveness.*—Retentiveness in nerve-centres is the tendency to repetition of similar action under similar stimulation, as in a common reflex action. This property appears comparable to inertia in mechanics (see 31).

(73) *Delayed expression.*—This character is a relation in time between the impression produced in the centres and its visible expression. That some impression was produced by the antecedent of the delayed expression may be fairly assumed. Retentiveness preserves the impression till it is expressed in visible movement (see 32).

(74) *Double action in nerve-centres.*—It seems that the nerve-centres affected by an impression may undergo some local molecular change, and also send efferent currents to muscles producing visible movements (see 33).

(75) *Compound cerebration.*—A primary stimulus may be followed by currents passing from certain cells to other groups of cells, to be finally succeeded by movements well adapted to the circumstance which produced the primary stimulus. The causes of such action do not appear manifest (see Compound Series of Movements, 34).

(76) *Reinforcement.*—It appears that a nerve-centre may be stimulated by an afferent impulse, and may then discharge its efferent impulse to more than one centre, so that the nerve-currents become reinforced or strengthened as they proceed finally to the muscles which produce visible movement.

Such reinforcements occur at the earliest stages of existence, whereas "compound cerebral action" occurs only as a later development (see 35).

(77) *Diatactic action.*—Diatactic action is the term here used to signify the getting ready of the nerve-cells for combined action (see 66).

(78) *Psychosis.*—Psychosis is the term used to signify those physical changes in the brain, which corresponds to "a thought," and which are known to us only by subsequent expression in movement.

(79) *Cerebral inhibition.*—Cerebral inhibition and its sequences suggest the hypothesis that unions may be formed among nerve-cells, preparing them for combined action and series of actions, as expressed by definite series of visible movements. Definite series of movements, which had not previously been observed, seem to follow such impressions as produce a period of inhibition of movement; combinations and series of movements are due to efferent currents from centres. The hypothesis is "that during the period of inhibition functional unions are formed among nerve-cells," the evidence being that new combinations and series of movements follow.

(80) *Diatactic action and thought.*—As deductions from such hypothesis it is suggested that "thought" or an act of psychosis—which is known only by a combination or series of movements—is physically represented or corresponds to the formation of a union among cells (Diatactic Action). If the union thus formed discharges efferent currents to muscles, then the act of psychosis is expressed by movement. The passage of currents from the union formed may be long delayed after its formation. The union may be followed by currents passing not directly to muscles, but to other cells forming them into other unions, and so on through a long series till at last currents passing from the last union to muscles are expressed by visible movements.

To give further illustration let A, B, C, D, E, etc., represent certain nerve-centres, and a, b, c, d, e, etc., the muscles stimulated by these respectively. An incident force—say, the sight of some object—may be followed by union ADF, which, sending currents to D and E, is followed by union DE, and this sending currents to muscles d and e, is followed by movement de, the formation of ADF and DE corresponding to intermediate thoughts or acts of psychosis.

(81) *Theory of psychosis.*—In the expression of psychosis by its sequential movements we see a series of actions having complex relations. They may effect but a slight amount of

mechanical work, but they may have special antecedents and sequents of much interest.

The movements which indicate intelligence appear not to be distinguished by any special intrinsic characters, but by certain relations in the time and quantity of action in relation to antecedents, to surroundings, and to their sequences.

(82) *Intelligence.*—Intelligence is not a property of the brain *per se.* Intelligence is a physical fact capable of observation, but not capable of correlation with modes of force. According to the views put forward the physiological conditions of the brain giving it aptness for the display of the signs of intelligence are indicated by—

1. Action in many small parts, not necessarily directly stimulated by any present or immediate antecedent forces.

2. Retentiveness and capacity for delayed expression upon a subsequent stimulation.

3. Capacity for the formation of functional unions among cells upon slight stimulation, such unions sending efferent currents to certain centres or muscles, with exactness, upon their stimulation.

(83) *Note as to quantity of brain-wear in mental action.*—The display of intelligence does not depend upon the amount of brain-wear, but upon its susceptibility for control by the environment and its relation to past impressions.

(84) *Conclusion.*—In conclusion I would suggest that new physical signs are here presented for the clinical observer; postures and movements in the body are signs produced by action of the nerve-centres, and they are capable of exact record. It has been my endeavour for some years to render such observations more exact by graphic records.* The attempt has also been made to enumerate these movements and their special combinations, hitherto with only partial success.

In the study of microkinesis we see the earliest manifestations of the faculty for the expression of the action of mind. The gradually increasing sensibility of nerve-centres for immediate and delayed action, as controlled by surrounding forces, appears to produce the signs of active intelligence.

Certain properties and modes of action among nerve-centres appear to be demonstrated by the observation and analysis of movements.

* "Journal of Physiology," Vol. iv, part 2.

CLINICAL NOTES AND CASES.

Cases of Incendiarism with Commentary. By John Baker, M.B., Assistant-Medical Officer H.M.C. Prison, Portsmouth.

This subject is probably more frequently alluded to and more fully treated in foreign than in English psychological literature. It may therefore be not unprofitable to review the details of some of the more interesting cases which have from time to time occurred in this country, and to discuss briefly their mental peculiarities.

It is a matter of common knowledge that when offences of this nature are perpetrated by sane persons a motive invariably underlies the crime; the usual motive being to obtain money by defrauding insurance companies.

The crimes of these incendiaries sometimes bring in their train occurrences probably unforeseen and unintended by the authors, as witness the sacrifice in London recently of the lives of two young boys who fell victims to their father's criminal misconduct in causing his shop to be set on fire. When actions such as these come to be considered, it seems natural to conclude that anyone who can deliberately, and with evil intent, set fire to a building in a crowded locality, devoting, it may be, both life and property to destruction, must be in a measure devoid of moral sense. Still, moral perversion of this sort is no excuse for crime, and the punishment inflicted ought to be commensurately proportionate to the magnitude of the offence.

Another and frequent motive for arson is revenge, a passion which is often rendered fiercer and more absorbing by the effects of alcohol. Drink, in this as in other forms of crime, plays a conspicuous part, and by exercising its pernicious influence on the brain, tends to weaken the powers of self-control in many individuals, who might otherwise hold in check their revengeful desires.

L., convicted for arson, began to drink at the age of 15; both parents were confirmed drunkards. He was 16 years old when he reached home one evening in an inebriated condition. He was denied his supper, and on this account he, in his drunken blindness, immediately began to meditate a diabolical revenge. The family had retired for the night, so he proceeded to collect pieces of wood

and coal under the staircase leading to the sleeping apartments, and, having poured a quantity of petroleum over the mass, ignited it. Fortunately his father appeared on the scene and succeeded in subduing the flames before they had obtained a hold. L. states that at the time of the occurrence, he was "stupid with drink."

Another man, N., when æt. 31, set fire to a barn and several stacks of hay because his master, who owned the property, refused to pay him some wages. Shortly before the outbreak of fire N. was drinking with some companions, who taunted him on the loss of his wages. Irritated by their gibes and laughter, and excited by drink, he hurriedly left their company, vowing that "he would be even with his master,"—with the above result.

The element of revenge is also a powerful incentive to arson amongst weak-minded people. They are usually people of defective mental organization, *i.e.*, intellectually or morally weak, or both combined. Those people, by reason of real or fancied wrongs, sometimes seek, by acts of incendiarism, to wreak their revenge on those whom they fancy have injured them; or driven by distress and want, whilst wandering aimlessly about the country, set fire to isolated stacks or outhouses, in order that by so doing they may find shelter in prison.

Amongst men guilty of arson who have come under my observation here, there are a few who, in comparison with the remainder, are of rather defective mental capacity. Several also are of inferior cranial development. Two have twice received sentence for incendiary acts.

C., æt. 46, single, labourer, is one of a family of ten, some of whom have led a steady life, others, including C., quite the reverse. His father was a confirmed drunkard, and he has followed in the same path. He never attended school; at 25 years of age he suffered from rheumatic fever, and now has heart disease. Mentally he is stolid and indifferent, with rather weak memory. In 1878, when under the influence of alcohol, he, apparently without any reason, set fire to a stack-yard, for which he was convicted. In 1886, a few months after leaving prison, he returned to his former haunts and his old habits. Within a week he again set fire to the same stack-yard, causing much damage and loss. At his trial he maintained an attitude of the most callous indifference; and even now, with the prospect of a long imprisonment before him, he affirms that "the farmer has got the worst of it," and gives as his reason for the crime that "he wished to be even with the farmer, who had given evidence against him at the former trial."

D., æt. 54, has a family history of phthisis, is married and has five children, the eldest of whom appears to be imbecile. In childhood he suffered from "brain trouble." His memory is

defective, and generally he is rather weak-minded. In 1866 he set fire to an out-house, and in 1885 to two stacks of straw without knowing to whom they belonged. When apprehended for the second offence he said "I know I did it; I don't know what I am doing half my time." He admits firing the stacks to get back to prison, being at the time in want and out of work.

Acts of fire-raising committed by men such as these may be regarded as essentially criminal, for although a certain amount of weak-mindedness may be proved to exist, it is not of sufficient importance as, taking the nature of the crime and the existent motive into consideration, to warrant the question of responsibility being raised. On the other hand, should the weak-mindedness amount to imbecility, or be the result of a neurosis, *e.g.*, epilepsy, or should unquestionable signs of mental aberration account for the incendiary act, then such act may be supposed to be an accompaniment of insanity.

By the older writers on psychology this incendiary propensity, if it may be so termed, was elevated into a special form of insanity and designated by the name of pyromania.

This classification is regarded by modern writers as uncalled for, and Griesinger states that it is "purely artificial," although he remarks that it possesses at least the advantage of previously settling the subject under discussion.*

The term pyromania seems to be misleading, implying as it does an instinctive and therefore a special insanity, rather than a reasoning form, which in the majority of instances it appears to be. Holding this view therefore, it may be well to follow the example of Jessen in his monograph on the subject,† and arrange the cases at disposal, culled, for the most part, from the records of Broadmoor Asylum,‡ according as they are associated with the various recognized forms of insanity.

But before proceeding to the detailed description of some of those cases, it may be of benefit to afford some information regarding the number of patients admitted into Broadmoor charged with incendiarism. In the course of 22 years (1864-1886) the total number (107) of those patients is only exceeded by the numbers of those received for homicidal offences, burglary and larceny. Of those 107 patients 99 were males, and only eight females. Four of the male

* Griesinger on "Mental Diseases," Sydenham Series, p. 270.

† "Psychological Medicine," Bucknill and Tuke, note p. 290.

‡ My thanks are due to Dr. Nicolson for his kind permission to utilize my Broadmoor notes.

cases were readmissions, two on relapse, and two after a fresh offence of arson, thus reducing the total number of persons admitted for incendiarism to 103, viz., 95 males and eight females. The percentages to the total number of persons admitted for all offences are—males, 7·5 per cent.; females, 2 per cent.; total, 6·2 per cent.

The small number of female cases may excite comment, since it is generally understood that many cases of incendiarism occur in young females between the ages of 12 and 18, the act being supposed to have some relation to the then occurring changes in the reproductive system. Griesinger observes on this part of the subject, that "incendiarism may arise from the fact that to those persons in whom the tendency has been most accurately observed, viz., young persons, particularly young maidservants, fire, with which they in the performance of their duties have much to do, is always ready at hand, and presents itself as the readiest means by which they can satisfy the morbid craving which torments them,—a means which is easily employed, and which requires neither great energy of action nor violent determination to make use of." However this may be, such cases seem to be of much rarer occurrence in England than on the Continent, where they are not infrequently observed. An examination of the English prison blue-books affords evidence that arson amongst females is a comparatively rare crime in this country, and only one of the Broadmoor cases (female) was under 22 years of age.

The annexed figures show approximately the nature of the psychical condition observed in connection with the cases admitted into Broadmoor Asylum (1864-86) :—

	Males.	Females.	Total.
Imbecility (Congenital)	35	1	36
Epilepsy (Congenital)	4	0	4
General Paralysis	6	0	6
Mania, Acute (usually à potù) ...	5	1	6
„ Recurrent	4	0	4
„ Chronic	6	1	7
Melancholia	17	4	21
Monomania	8	1	9
Dementia	10	0	10
	95	8	103

This indicates that fire-raising is most common among congenital imbeciles and melancholiacs.

Eighteen men, including five of the six general paralytics, were married; also all the women except the congenital imbecile. The ages of the male congenital imbeciles, none of whom were married, averaged 20-25, some younger, some older; that of the female congenital imbecile was 21 years. All the rest of the females exceeded 30 years at the date of the commission of the crime which led to their incarceration.

I.—*Incendiarism associated with Congenital Imbecility.*

(*a*) H. C., æt. 27, was transferred to Broadmoor from Wilts County Asylum. He was dangerous when provoked; peevish and irritable, with a strong propensity to violence, and prone to secrete weapons; also addicted to masturbation. He set fire to a house for the pleasure of seeing a blaze. He died æt. 35 of heart-disease. Post-mortem examination revealed a large brain weighing $55\frac{1}{4}$ozs., with the cerebral convolutions, asymmetrical, and the fissure of Rolando and anterior parietal convolutions indistinctly marked on the right hemisphere.

(*b*) S. S., æt. 20, transferred from Chester County Asylum. Forehead was narrow, and there was a history of head-injury in boyhood, inflicted by the kick of a horse. He set fire to a hay-stack to be revenged on the owner, a farmer, who was in the habit of teasing him. Died æt. 38. Post-mortem examination showed deficiency of grey matter, also a cyst containing a small quantity of rust-coloured fluid in the posterior part of the right hemisphere. The brain weighed $47\frac{7}{8}$ozs.

(*c*) T. O., a congenital imbecile, with defective speech and chorea, was tried at the age of nine years for arson of a stack, the crime being apparently due to childish mischief. He was considered unfit to plead, and sent to Broadmoor, whence he was discharged to a workhouse after a few years' detention. Not liking the workhouse accommodation, he repeated the same offence as formerly, in order that he might be sent back to Broadmoor, where he is at present. His conduct is generally good, but sometimes mischievous. He cannot articulate properly.

The other cases included under this heading present similar features to those quoted. A motive may or may not be present. Childish mischief or imbecile spite seem to be the prevailing incentives to arson in this class of patients.

II.—*Incendiarism associated with Epilepsy.*

In a former article in the "Journal of Mental Science"* I have already pointed out that epileptics are mostly given to crimes in which the element of violence enters, still instances of arson do occur amongst this class of patients, the culprit generally being of the congenital type.

* July, 1887.

(*a*) W. G., an epileptic boy with double strabismus, was tried when ten years old for arson of a stack of hay, which he stated another boy persuaded him to set on fire. He was sent to Broadmoor, where he remains. He is mischievous and of a low moral nature. He has frequent epileptic seizures, which he has always been subject to.

(*b*) J. J., a shoemaker, was tried when 30 years old for setting fire to a storehouse occupied by his father, and acquitted on the ground of insanity. He had been married five years, but during four of these his wife had been separated from him. He was twice invalided from the army for epilepsy. His family history is strongly neurotic; mother was epileptic, two uncles were confined in asylums, and eight brothers and sisters died whilst young of brain-disease. He requested employment from his father, but his offers of service were rejected, and in revenge he set fire to the storehouse previously mentioned.

III.—*Incendiarism associated with General Paralysis* may be regarded as uncommon. The Broadmoor records show six cases; five were married; all died after a short period of residence, and in all the characteristic post-mortem appearances of the brain and its membranes found in this disease were observed.

(*a*) S. B., æt. 40, labourer, single, was tried for arson of two stacks of straw. Fourteen years previously he sustained a severe head-injury, owing to a blow from a falling piece of coal. The reason assigned by him for his crime was that "he wished to clean the stack-yard." He died æt. 42. Brain weighed 47ozs.

(*b*) W. S., æt. 38, set fire to a stack of hay. He died æt. 39. The brain weighed 46½ozs., and in addition to the usual appearances, there was found an area of softening, ¾ of an inch in breadth and depth, on the right temporo-sphenoidal convolutions.

(*c*) W. C., æt. 35, tried for setting fire to a dwelling house and acquitted on the ground of insanity. Died æt. 40. The brain in this case weighed only 39¼ozs.

Incendiarism associated with forms of mania sometimes occurs. The majority of acute cases probably fall under the heading of mania à potù, and are the direct results of drink.

A., æt. 46, a married clerk, was convicted of setting fire to a haystack in 1887. The judge held that drink was no excuse for arson, and remarked that a severe sentence must be passed, so that A. might be kept away from the temptations of alcohol for a long time. Family history is neurotic. Father died of apoplexy, mother alive, but of a hysterical and nervous nature, and "very queer" at times; one sister paralytic and subject to attacks of petit-mal; one of his children is very nervous, and an uncle is described as excitable and eccentric. A. became a heavy drinker at 25 years of age; in 1881 he had an attack of delirium tremens.

Occasional outbursts of drinking took place afterwards, till in one of them he committed the act above referred to. He has a very indistinct and hazy recollection of the occurrence, and had no idea to whom the stack belonged. No food, only alcohol, had been taken by him for two days previously.

In the following case the incendiary act was associated with an attack of recurrent mania complicated by delusions.

H. R., æt. 50, single, a strolling player, was charged with arson in 1865. He was found insane on trial. He is described as a man of very variable temper, sometimes cheerful and industrious, at other times violent and maniacal. He set fire to a barn because he wished, in this manner, "to inform the neighbouring town that he was about to be murdered."

The next case is one of chronic mania.

A. G., female, æt. 36, was admitted into Broadmoor in 1880. Her previous career had mostly been made up of a repetition of short sentences of imprisonment for petty offences, the results of her intemperate habits. On one occasion she set fire to her cell in York Castle, because the governor had refused to accede to some request she had made. She suffered from chronic mania with delusions of persecution, and was continually in seclusion. Her death took place recently, the cause being cancer of the uterus. The meninges showed old inflammatory changes; the cerebral convolutions were indistinctly marked, and the grey matter thin and deficient; the brain weighed 40$\frac{3}{8}$ozs.

Next to congenital imbeciles, those persons suffering from melancholia supply the greatest number of insane incendiaries. In some cases the act of fire-raising seems to be resorted to for the purpose of relieving the intense feeling of anxiety and general uneasiness which pervades the mind. The following instance shows that comparative mental ease may follow the morbid depression of acute melancholia, after the commission of the crime.

F. M., a patient, acquitted, on the ground of insanity, of arson, was in deep distress mentally, caused by domestic troubles. He set fire to some stacks of hay, and states that immediately afterwards he felt relieved in mind.

In other cases, again, a prominent feature is the presence of religious delusions which frequently have a direct bearing on the incendiary act.

The case of F. D. is a curious one.

This man suffered from melancholia and religious delusions. Two years previous to his trial he had been confined in a lunatic asylum for some time; he had formerly contracted syphilis; by

occupation a plasterer, was married and had one child. At the time of his trial for arson he was thirty years of age. His father's death, which had occurred shortly before, affected him very much; he became low-spirited and suicidal, and his morbid imagination conceived the idea that it was possible to communicate with his father's spirit. Under this delusion he posted a letter containing a message to his father, and inserted in the letter-box, along with it, several matches and pieces of straw, believing, that if the letter was then and there consumed, the smoke would be wafted away and convey the message to its destination. He was acquitted on the ground of insanity. During his residence in the asylum he was possessed of many religious delusions, and was in the habit of signing himself F. D., Christ. He died of peritonitis, æt. 50. The brain weighed 51½ozs. No special pathological appearances were noted.

E. J., a female, twice married, but no children, was tried at the age of 46 for arson of a dwelling-house. Her second husband had left her, and this circumstance produced depression of spirits; in addition she took to drinking, and the above crime was the result. She seems to have had little or no recollection of the event. There was a history of syphilis, and her family history shows that her youngest sister and an uncle were insane; also that a brother died from the effects of excessive drinking. During her residence in Broadmoor she was subject to alternate periods of exaltation and depression. Finally paralysis succeeded, ending in convulsions. The post-mortem examination revealed syphilitic caries of the cranial bones, the remains of old hæmorrhages in both corpora striata, and an area of inflammatory softening occupying part of the surface of the right occipital lobe and extending to the right cerebellar lobe. The brain weighed 40½ozs.

J. G., æt. 38 in 1852, was, in that year, tried for placing an obstruction on the railway, and removing a signal-post. He was found insane and confined in an asylum, but was for some reason pardoned and set at liberty two years afterwards. He twice attempted suicide. In 1857 he set fire to a chapel and was again acquitted on the ground of insanity, finally transferred to Broadmoor, where he died æt. 62. He was subject to heart-disease and fainting fits, which left him in a lost and demented state (petit-mal?).

The next case, although not exactly coming under the heading of melancholia, may be appropriately described here, because, in so far as the nature of the crimes committed is concerned, it affords a parallel to the previous one. It is not a Broadmoor case, but is interesting from a psychological point of view.

J. A. was convicted for placing an obstruction on the railway, and is undergoing sentence. He is thirty-one years of age, and

single. His family history shows neurotic and tubercular tendencies. His paternal grandmother was insane, likewise a maternal aunt; his father, brother, and sister all died of phthisis. At the age of fifteen he began a career of dishonesty, and almost simultaneously took to drink. When æt. seventeen he enlisted in a dragoon regiment and soon afterwards fell from his horse, sustaining severe concussion of the brain. His conduct during a long convalescence was strange at times. Ultimately he rejoined his regiment, but not for long; for in consequence of the head-injury a very small amount of drink produced a strong effect on him. The consequence was that he assaulted a superior officer and was discharged from the army. Twice after this he succeeded in re-enlisting, but on each occasion was detected and punished by imprisonment. He next returned to Aldershot, where he had been formerly quartered, and whilst wandering aimlessly about and under the influence of alcohol, he entered an unoccupied house, newly-built, and set the building on fire—a motiveless crime. Two years afterwards, near the same town, he placed a sleeper on the railway, for which act he can assign no reason, except that he was drunk at the time. At first, on reception, he was troublesome, occasionally mutilating himself to evade labour, but latterly his conduct has been good and promises well for the future; this will entirely depend on his abstention from alcohol. The incendiarism in this case was evidently the result of drink upon a mind inherited ill-balanced, at all times ill-regulated, and rendered more so by the head-injury.

E. H., a female, æt. 43, married, and has thirteen children, set fire to a warehouse. She was depressed in mind at the time, in consequence of her daughter's removal to an asylum some time previously. She had expressed a wish to be placed beside her daughter, and had just started to visit her a few minutes before the fire was discovered. She attempted suicide and said she was tormented by the devil. She is recovering in Broadmoor.

Closely allied with the subject of incendiarism in melancholia is the consideration of those cases, where the act is an accompaniment of monomania; here, too, it is frequently associated with religious delusions, and also with characteristic sensory hallucinations.

J. W., a sailor, married, received a fright in boyhood. When æt. 34 he set fire to a lodging-house in consequence of being tormented constantly with an intolerable smell of burning, and the noise of the cracking of fire, both pure hallucinations. He was found insane and sent to Broadmoor. After admission, he on one occasion burned a dictionary, alleging as a reason that he could not find the letter S in it. He has constant disagreeable sensations of smell and taste; and is gradually becoming demented.

Amongst the other cases included under this heading, some had hallucinations of sight and hearing, and one man declared he was burned with hot irons during the night.

Incendiarism is sometimes associated with dementia.

W. D., an elderley man, set fire to several stacks. For some years previous to the crime he had behaved in a strange manner, wandering about and sleeping in outhouses, hardly ever returning to his home. No motive could be discovered.

The number of cases quoted is limited, but they suffice to indicate the general relation of acts of incendiarism to the various forms of insanity.

Some upholders of the independent existence of pyromania have endeavoured to prove that it is an "instinctive" insanity, but the generally received opinion is, that it is in most cases likely to be a "reasoning" monomania. In some instances of moral insanity amongst children the destructive "instinct" may reveal itself in acts of fire-raising.

The following extract from Griesinger thus appropriately sums up this subject:—"The grand question in foro, in all such cases, must either be to ascertain whether there existed a state of disease, which limited or could have limited the liberty of the individual; sometimes these symptoms of undoubted mental disease can be clearly distinguished, a dominant feeling of anxiety, hallucinations, states of hysterical exaltation; in other cases the actual existence of a nervous disease, epilepsy, chorea, renders probable the assumption that the accused has been subject to some passing mental aberration."*

Professor Caspar "believes that incendiarism perpetrated either with or without motive is always a criminal act; and unless there is clear evidence of a disordered mind, it should always be punished as a crime."†

Some have denied the existence of a propensity to incendiarism as having any connection with insanity, but that is going too far, as I have endeavoured to point out in the cases cited.

* Griesinger on "Mental Diseases," p. 271.
† Taylor's "Medical Jurisprudence," p. 592.

*Case of Folïe à Deux.** By M. J. Nolan, L. & L.M.K.Q.C.P.I., L.R.C.S.I., Cert. Psycho. Med.; Fellow Roy. Acad. Med. I.; Assistant Medical Officer, Richmond District Asylum, Dublin.

The case of the brothers John and Richard C. is of interest, inasmuch as it presents a comparatively rare picture of psychical and physical identity.

For though it is by no means uncommon to see marked and striking likeness of features and general external conformation in individuals, we do not often find associated with such resemblances a corresponding uniformity in the grouping of the psychical factors. Leibnitz asserts that each one of us is a monad—unique in his individuality—and this is, doubtless, a truism when the normal constitution of the mind is intact, but as is well illustrated by this case, morbid mental process can efface that grand characteristic, and produce only too well perfect duplication of its diseased self. This duplication has hitherto received but little if any recognition, perhaps from the fact of its rare occurrence; consequently I am induced to bring this case under notice as showing how it is brought about by a psychical evolution.

Previous History.—The father died insane, leaving his wife and six children in abject poverty. Nearly seven months after his death another son, Richard, one of the subjects of this paper, was born. The girls of the family (two) died in youth; one son emigrated, two got situations in adjoining towns, and thus John and Richard were left alone with their mother. Prior to their admission they had lived with her in a small cottage in a very remote and desolate mountain district—she insane; they weak-minded from birth. Studiously avoiding any intercourse with their neighbours, quarrelling between themselves, year after year, in monotonous toil, they eked out the barest necessaries of life. Though disagreeing on minor points they were at all times united in their devotion to their mother, who for upwards of seven years prior to her death, at the age of eighty, was bed-ridden from infirmity. During the long period of her illness they daily washed and fed her with tender care, and night after night relieved each other in lonely vigil by her bedside. In those hours of watching

* Paper read at the Quarterly Meeting of the Medico-Psychological Association, held at the College of Physicians, Dublin, November 29th, 1888.

For documents bearing on the previous history of the subjects of this paper I beg to express my grateful acknowledgments to Dr. Conolly Norman, who kindly placed them at my disposal.

the elder brother, John, imbibed the insane story which the mother had had transmitted to her by the father. Frequently he was told a well-worn tale of noble descent, vast wealth, injury, and persecution. His uncle, he was told, had married the Queen of England, and he was to wed his royal cousin. All the surrounding country —his legal property—was held from him by usurpers. It was his duty to win it back again, and with his brother live on it in befitting state. All this and much more of a similar character took deep root in his mind and grew apace, so that at the time of her death he felt ready to carry out her dying injunction, which commanded him to apply to "his cousin King William of Prussia for help to crush his enemies." Her death depriving them of the mutual object of their solicitude and care, they became deeply attached, and thus drawn together the congenial mind of the younger accepted without question the propositions of the elder. They united in their projects for redress, commencing their operations by trespassing on an adjoining demesne, where they set to work erecting fences and cutting down hay and growing crops. On the date of their admission to the asylum a police sergeant apprehended them while thus engaged, whereupon they attacked him in a most savage manner with sticks and stones, and even bit him. On his information they were committed as dangerous lunatics.

On admission (July 5th, 1888).—John C. (the elder), aged 45. Height 5 feet $4\frac{1}{2}$ inches. Weight, 8st. 7lb. Lungs healthy. Heart-sounds weak and muffled. Valvular bruit, due probably to congenital defect. Pulse irregular and intermittent. The extremities cold. Genitals small. Considerable phimosis. Slightly lame, as a result of old injury to the knee. Simple expression and manners. States he assaulted the policeman as he came to rob him of his property. He has been sent here through envy and spite, and because a neighbouring landlord owes him a large sum of money. He intends very soon to visit the Queen, his aunt, in order to get matters righted. He will also visit the Prince of Wales. When asked what his father had died of, he assumed a thoughtful look, and after a pause said, "My father? Is it what my father died of? Oh! my father? He died of a fever, your honour." Asked what fever, he replied, "What fever? Is it what fever? He died of a brain fever, your honour, sir." He shuffled his feet in a peculiar manner when spoken to, and his replies were accompanied by frequent pulls at his forelock, and characteristic gestures. When asked if he would care for any employment he respectfully begged to be excused, as he "was never accustomed to do any work—the Queen was his aunt; he had plenty of money stored up." Very simply and pathetically he told the story of his mother's illness and death, and with pride described her funeral, which, he said, was "grand entirely. Plenty of fine people at it, and an elegant coffin he gave her that cost sixteen shillings—every

penny of it. Indeed," he added, "she deserved it all, your honour; for she pitied us, lone and single, and without womankind. She was close on a hundred-and-eight, poor old creature; but we only put one-hundred-and-five on the coffin, as we did not like to go too high!"

Richard C., aged 40. Height 5 feet 6½ inches. Weight 9st. Lungs sound. Heart-sounds weak and irregular. Pulse weak and small. Extremities cold and congested. Genitals small. Phimosis—as in the brother's case—considerable. Very closely resembles the brother in expression and manner. Not alone does he mentally reflect as in a mirror the brother's delusions, but he expresses them in as nearly as possible the same words. Moreover, his idioms, intonation, and gesticulations are so closely copied as to suggest perfect mimicry. The question put to him concerning his father's illness elicited an echo-like response, prefaced by the same thoughtful look and pause. "My father? Is it what my father died of? Oh! my father? He died of a fever, your honour."

Subsequently, when interviewed together, it would seem almost as though they had an instinctive knowledge of each other's thoughts, as they replied to every question put to them in a sort of duet, at the same time striking similar attitudes with the harmony of a pair of marionettes pulled to execute the same movements.

August.—Their mental condition is unchanged. They sit idly in their different divisions refusing firmly but respectfully to do any work. They complain of the food and clothing (which is far better than what they have been accustomed to) as not being suitable to men of their birth and position.

September.—Though now separated a considerable time, they still cling to their delusions with unweakened faith. They cannot be induced to take part in employment of any kind, however light. The elder brother feels deeply his separation from the younger. He cries bitterly at night, and during the day mopes, pale and mute, from end to end of the ward. He sleeps very little, and suffers from dyspepsia. In the school division, the younger brother seats himself mechanically in the classes, but will not interest himself in the work. They decline to attend the chapel, as they say they have lost faith in the Protestant religion, since it permits their persecutors to be members of its community. They state, however, that they "pray to God three times a day—to the good God who has left them their senses and reason, and who watches over them."

October.—A gradual but decided improvement has taken place in the mental condition of the elder brother during the past month. He now accepts the separation from the other calmly, and is somewhat wavering in his old delusions. His general health has also undergone a favourable change from the exhibition of tonics and extra diet. In the younger no like improvement is

to be noted. They still persistently decline to work or make themselves useful in any way, but they are at all times quiet and tractable. *It is remarkable that now for the first time since their admission, over three months ago, and notwithstanding the fact that they have been all that time separated as rigorously as possible, they give utterance to a delusion that a "pretended aunt of theirs, who is no connection of the Queen's, has taken an immense property from them under false pretences." They allege "this pretended aunt is a bastard," and not the daughter of their grandfather, who "was dead from the hips down." That this delusion should arise simultaneously in both minds, when the brothers were kept apart, is a very remarkable fact, and deserves special notice.* They agree on its very minutest details, and yet, as far as can be ascertained, there is nothing whatever in their family history to lend it colour.

November.—The elder, whilst clinging to the delusions of property, now denies that he ever claimed any connection with the Royal Family. He laughs at any such assertion, and says if let out to work again in the outside world he would soon show how little he cared for his "grand relations." He states he could never have uttered such an absurdity, and it must have been a rumour circulated by envious people to injure him. He is annoyed to hear that his brother believes it, and tries to excuse him by saying he was always "innocent." In other respects his mental condition is unchanged; while that of the younger is just the same as it was on his admission four months ago. They have improved in health, and accept their situation calmly, having fallen into a careless, idle groove, evidently the involuntary reaction from their past worry and hardships. They eat and sleep well, and though they still express a wish now and again to be permitted to walk and talk together, their separation no longer causes them the poignant sorrow they suffered from when first parted. They constantly express annoyance at the conduct of the "pretended aunt;" indeed, this delusion seems to have gained dominance over all others. On the night of the 22nd inst. both "dreamt" or "saw in a vision" their deceased mother. To the elder, John, she appeared at about 1.30 a.m., "all in white, but young and beautiful." She told him to "be of good cheer—prosperity and comfort was in store for him." She visited Richard "a little after two o'clock," all in white, even to her gloves. "She did not say anything to him, but was content to find him sleeping quietly." After hearing those statements made unsolicited and separately, on the morning of the 25th inst., the brothers were, to their great delight, brought together, and they at once compared their "visions," and agreed to the very smallest point on all they saw in them. The younger brother remarked that as John was the elder and favourite the mother had gone to him first, and that she did not address anything to himself specially as she was satisfied that he was under John's care.

Remarks.—Dr. Hack Tuke has grouped the varieties of this disorder under four headings.* To the fourth, "in which one lunatic infects another lunatic with his special delusion," this case may be assigned. Here we have the father primarily influencing the mother, who transmits the affection to her eldest son, he in turn communicating it to the younger. Both mentally weak from birth, it was, however, only when still more enfeebled by the strain of nursing the insane mother, and by the grief her loss occasioned, that they shared the special delusions. The antecedents in this case are very analogous to those of the case of the family quoted by Maudsley in his "Pathology of Mind," from the *Zeitschrift f. Psychiatrie*, B. 29, H. 2. In the German case no less than eight members of the family were affected. In the present case the insanity of four is certain; and it is more than probable that had the four remaining members of the family continued in the same surroundings they too would have suffered. As it is one is weak-minded, and the fact that the others (if still alive) have not any one of them communicated with the other since childhood seems suspicious. In each instance the insane father infected the mother; the weak-minded offspring falling a ready prey to the conjoint evil influence of the parents. Both families lived in secluded country districts, and in great poverty. The delusions were similar—robbery of property and persecution; though in this respect neither case is remarkable, as, according to Dr. Marendon de Montyel, "all examples of *folie à deux* present delusions of persecution, *the* insanity of the nineteenth century."

Perhaps, however, the most striking feature in this case of "these two Dromios, one in semblance," is the fact, before mentioned, that *since* their admission to the asylum (and though carefully kept apart by sending them to distant wards, and giving stringent injunctions to the attendants that they should never be permitted to associate) they not only continued to reflect the mental condition one of the other, *but they absolutely originated individually a common delusion, and expressed it in almost identical words.* From this fact, which, I presume, cannot be exceptional, Spitzka's remarks on communicated insanity appear rather strange from so eminent and thorough an observer. "Imitation," he states, "may occur in real insanity, but it is limited to

* Paper read on "Folie à Deux," at the British Medical Association Meeting (Section of Psychology), Dublin, 1887.

delusive conceptions, which are accepted by weak-minded lunatics from more intelligent ones in what the French call *folie communiqué* and *folie à deux.*" That such limitation is not by any means an essential feature in this most interesting affection is proved by the case now described. When a stronger character has succeeded in influencing a weaker, the latter impelled into a morbid groove, and having previously been exposed to the same injurious antecedents, and surrounded by like external influences, might not improbably develop *per se* delusions of an identical nature, and not necessarily merely "accept" them by transmission. It is well known that in healthily constituted minds a condition very similar to this is not uncommon. Old married couples whose ideas, tastes, and feelings have become gradually harmonized by their mental inclinations to meet each other's views, are not unfrequently struck at the same moment by the same thought, and simultaneously give utterance to it, though the matter to which it refers has not been by either under recent consideration. Where morbid processes have damaged the highest psychical constituents, such a coincidence of thought is still more likely to occur, in proof of which may be mentioned the case of the twins, Martin and Francis, detailed by Bonnet, in the *Annales Medico-Psychologiques.* The brothers were the victims of *folie à deux*, with a suicidal tendency. Though living many miles apart, they one night had a precisely similar dream, and awoke shouting the same words: "I catch the thief—he is injuring my brother." In the very case under notice, of the brothers John and Richard, their dream respecting the visit of their mother at about the same hour on the same night is another example of coincidence of thought in degenerate minds, at a time, too, when sequence of thought is no longer under the guiding and restraining influence of volition. Is it then to be marvelled at that in the case of these brothers, John and Richard C., the coincidence should arise in disordered minds, the highest powers of which were constantly directed to the fostering contemplation of their own creations? In conclusion, it may be said that to this coincident generation of morbid thought, as well as to the destruction of the higher reasoning powers, may be attributed the curious phenomena of this disease, and the unfavourable prospect of cure it holds out. So thorough is the ruin it generally entails, at least in those primarily affected by it, that it may be said to be a psychical sclerosis, since not alone the highest and most

essential organizations are destroyed, but new harmful fabrications of morbid thought are constantly proliferated to invade and supply their place. This psychical sclerosis, starting from the same source, in brains very similarly constituted in their most delicate and minute structures, and running concurrent courses, produces the coincident delusions, hallucinations, and dreams of true *folie à deux.*

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*On a Case of Acute Mania, with Symmetrical Gangrene of the Toes (Raynaud's Disease).** By J. Macpherson, M.B., Senior Assistant Physician, Royal Asylum, Morningside, Edinburgh.

The subject of the following notes was a girl eighteen years old, who was admitted to the Royal Edinburgh Asylum on the 28th of March of last year.

She was of a pleasant and cheerful disposition, steady and industrious in her habits, and had never previously suffered from any serious bodily or mental ailment.

The hereditary tendency towards insanity was very strong, her father, mother, and a maternal aunt having been insane, and a sister having died insane. With an heredity such as this, the period of adolescence is especially dangerous. The exciting cause of her illness was supposed to have been a love affair. She was mentally affected for a week previous to admission, and the onset of the attack was characterized by depression and also by suicidal impulses—a rather unusual precursory sympton of acute mania.

Her mental state on admission was one of considerable excitement, accompanied by exaltation and grandiose ideas. She laughed immoderately, gesticulated in a grotesque manner, and talked in a loud voice. Her conversation was incoherent, and her memory was impaired.

In appearance she was a comely well-nourished girl, with dark brown hair and blue eyes. Her pupils were equal, dilated, and reacted to light.

Her temperature was 98° F., her pulse was 70, and the organs in the chest and abdomen seemed healthy.

Her menstruation had for many months been irregular, but there had been no menorrhagia.

On account of the patient's habits, her urine could not be obtained for examination.

April 1.—About four days after admission, patient was noticed to have a cold, pinched appearance, and her hands and arms up to

* Read before the Quarterly Meeting of the Medico-Psychological Association, held in Edinburgh on 8th November, 1888.

the elbow had a mottled blue and red colour, as if they had been exposed to intense cold. This condition lasted for about four days, varying in degree at different times; and at the end of this time she was placed in bed in a room kept at a uniform temperature of about 67° F.

Her hands and forearms, and also her feet and legs up to the knee, presented the following phenomena:—They were intensely cold, especially towards the extremities; the skin was of a pale colour, mottled with blue, and was dry, hard, and rough, cutis anserina being present; the pulsation of the radial and tibial arteries could not be felt.

The temperature in the axilla was 98° F.

In addition to being in the heated room, she was well wrapped in blankets, the arms and legs were encased in cotton wool, and she was surrounded by hot-water bottles. Internally, she was liberally supplied with hot beef tea and stimulants.

Her mental condition had undergone a change; instead of being continually talkative, noisy, and demonstrative, she had periods of comparative quietness, accompanied by slight stupor, though at other times she was restless.

April 5.—Late on this day extensive vasomotor changes took place in the parts already mentioned. The skin of these parts gradually assumed an intensely congested appearance, the colour was a uniform dull brick red, the parts seemed fuller than before, the skin on the arms and legs remained dry, though that of the body and face was moist. When deeply pressed upon with the fingers, a pale spot was left, which slowly regained its red colour; the parts were warmer now, the superficial temperature being 97° F., but no pulsation could be perceived in the arteries. This congestive appearance showed itself on the right side before the left side, and was always more marked on the right side. It attacked the arms before the legs. These changes were slight in the face, and were most marked in the right leg and foot.

The patient's general bodily condition was one of great weakness, the expression of her face had entirely changed, having lost its brightness. She appeared to understand what was said to her, but did not answer questions. The excitement had now passed away, though a slight restlessness, manifested by throwing about the arms and head, remained. She had short periods of sound sleep at intervals. Her temperature was 98° F. To-day she refused all nourishment, and required to be fed through the nasal tube with the following mixture:—

Strong beef tea, about half-a-pint.
Milk, about half-a-pint.
Two eggs.
Carnrick's beef peptonoids, a tablespoonful.
Juice of two oranges.
Brandy, $1\frac{1}{2}$ ounces.

April 6.—As the nurse was removing the cotton wool from the right foot she noticed dark spots on the tips of the first three toes, that on the second toe being the largest and encircling the nail. These spots were of a dull purple-black colour and seemed almost insensibly to pass into the surrounding dull red-coloured skin, which was very dark in the neighbourhood of the spot, and gradually assumed a lighter shade at a distance from it. These dark spots were immediately under the skin. There were no dark spots on the toes of the left foot, but, like the right foot, it had been congested, though to a lesser extent, during the night time. This congestion passed away in the morning, but towards evening it returned with greater intensity.

The face was rather pale, and the temperature in both axillæ was 98° F.

The pupils were equal, slightly dilated, and reacted slowly; the deep reflexes were present, but dull.

The patient had now passed into an unconscious condition, with stertorous breathing. Pulsation in the radial and tibial arteries was still imperceptible, and on the whole she seemed in such a weak condition that ether was injected subcutaneously, and two ounces of brandy were administered by the nasal tube. At this stage the patient was considered to be in a very critical condition by all who saw her.

After midnight patient woke up from her profound slumber and muttered incoherently for about two hours, when she again relapsed into a deep sleep, with stertorous breathing.

April 7.—In the morning examination it was found that the two remaining toes of the right foot had also dark spots on their points, while the previously described spots on the other toes had extended. At the same time the three first toes of the left foot were observed to be similarly affected, though to a less extent. There was also a perceptible though minute spot on the outer aspect of the fourth toe.

The intensity and extent of the black spots on each toe of the left foot corresponded exactly with the condition on each toe of the right foot, and the second toe of each foot was implicated to a greater degree than any of the other toes.

The congestive colour of the hands and arms appeared to be slowly passing away. The temperature in both axillæ was again 98° F. In the fore part of the day the patient was awake and restless, but in the afternoon she again dropped into a profound slumber.

As the patient was not yet taking any food voluntarily, she continued to be artificially fed twice a day with the mixture already described, which contains in a fluid state all the ingredients of a healthy dietary.

On the whole, the patient's bodily condition had somewhat improved to-day.

April 8.—During the night and most of the next day the patient slept at irregular intervals, and was restless both when asleep and awake. The spots on the left foot were less marked and appeared to be diminishing, but those on the right foot were more distinctly marked and had become more defined in outline.

The congestive colour in all the limbs was now seen to be distinctly passing away. As has been remarked, this commenced to disappear in the upper limbs before the lower; the disappearance in each case was not gradual, but was marked by irregular remissions.

These paroxysmal remissions had characterized the onset of the congestive stages, but were still more marked in their decline. The changes of colour varied in the limbs from time to time, but the changes in one limb seemed independent of the changes in the others. On several occasions, however, it was noted that the upper and lower limbs of opposite sides were similarly affected. These changes lasted generally for a period of from one to two hours. In about two more days the vasomotor disturbances of the limbs had entirely disappeared.

As regards the further history of the dark spots, those on the left foot gradually disappeared without producing any other changes, excepting in the case of the second toe, the dry cuticle of which peeled off. The same harmless disappearance of the spots took place in the right foot, with the exception of those of the great and second toes. Here there appeared to be a deeper implication of the tissues, for after the dry cuticle had been cast there came away several small pieces of dry slough, leaving punched-out ulcers, which took fully three weeks to heal.

April 10.—From the day of the subsidence of the vasomotor disturbances the bodily condition improved steadily, and arterial pulsation returned in the limbs.

Patient's temperature on the morning of this day rose to 100° F., the only occasion during the illness in which it rose above normal.

She also now took food of her own accord.

Patient's sleep was still characterized by its irregularity. She would sleep for about two hours, and would then pass two hours of great restlessness. She was now, however, becoming more intelligent, and could answer questions. In about a week afterwards she had fully regained her former bodily strength.

Concomitant with the improvement in her physical health was the gradual return of the acute mania. She became more and more restless, quick at repartee, impertinent, and finally noisy, talkative, and incoherent. The attack subsequently followed a normal course, and she was discharged, completely recovered, on the 28th September, 1888.

The symptoms we have described in the above case correspond so accurately with those given by Raynaud in the

reports of his cases that one can have no hesitation as to the correct diagnosis. One is, moreover, struck with admiration at the fulness and exactness of Raynaud's accounts, for we have noted no symptom in the case which has not already been described by him. The case, however, presents many interesting features of its own. In the first place, it supervened so prominently on the maniacal attack as to render it impossible to dissociate the cerebral and vasomotor affections from one another, and they must therefore be regarded as groups of symptoms of one great nervous disturbance. The disease has been divided into three stages, which are readily distinguishable in this case:—

1st. Ischæmia, or local syncope, caused by spasmodic constriction of the arterioles.
2nd. Cyanosis, or local asphyxia, caused probably by the reflux of venous blood into the venules, owing to the loss of the *vis a tergo*.
3rd. Gangrene, or local death, caused either by asphyxiation and starvation, or perhaps by direct trophic influence.

In the second stage, that of Cyanosis, when the gangrenous spots first made their appearance, we have recorded the observation that the venous colour of the limb gradually intensified the further away we traced it from the trunk, until on the tips of the toes it culminated in the very dark coloured gangrenous spots. This observation, I think, supports the view that there is (*a*) a reflux of venous blood, and that (*b*) the gangrene is due to asphyxia and starvation of the cells; for I believe that the gradually darkening colour towards the extremity is due to the fact that the venous blood gradually flowing farther and farther back from the great venous trunks is being more and more used up in its course, till it no longer retains any oxygenating powers.

We may here remark that pain, which is almost an invariable symptom, was not complained of, though much of the patient's restlessness may have been due to its existence.

To alienists, the changes in the mental condition produced by the onset of the disease are most interesting. Such changes are far from being of rare occurrence in this disease, for several examples have been reported from asylums, and Raynaud himself lays great stress on the mental changes and the association of the affection with neurosis generally.

In his original thesis (New Sydenham Soc., Vol. cxxi., p. 106), Raynaud remarks:—"On waking, the patient . . . remains a considerable time in a state of profound hebetude. It is of some importance to rouse the patient promptly from this condition, because whatever may be the cause of it, we have reason to fear, on the part of the brain, a morbid process analogous to that which affects the periphery." That this supposition which Raynaud throws out is correct, is rendered probable by the fact that vasomotor changes have been observed in the arteries of the retina during the course of this disease. Cases have also been reported in which delusions have occurred. Raynaud has frequently noted hysterical conditions, and one case of convulsions, and Southey has reported a case of acute mania. The mental symptoms in my case also support Raynaud's supposition; for, during the course of an ordinary attack of adolescent mania, there was a sudden alteration of the mental symptoms, with the occurrence of the visible symptoms of Raynaud's disease, the patient passing from a state of great exaltation and excitement to one of dulness and stupor. The mental symptoms, when at their worst, which occurred at the time of the congestive stage of the limbs, strikingly resembled the symptoms produced by cerebral congestion. There was the same flushed face, the same unconsciousness, and the same stertorous breathing. Towards the end of the congestive stage in the limbs, when its paroxysmal and intermittent character was most marked, there was observed a similar intermittency in the patient's mental condition, which varied between one of profound comatose slumber and one of great restlessness, each of these states lasting for about two hours at a time.

These central vasomotor changes are probably not limited to the higher cerebral region, but may also, by involving the organic centres, be the cause of the great bodily prostration which has frequently been noted in similar cases.

For many suggestions, during the preparation of this paper, I have to acknowledge the kindness of my colleague, Dr. George M. Robertson.

OCCASIONAL NOTES OF THE QUARTER.

Lunacy Acts Amendment Bill.

Notwithstanding the difficulty hitherto experienced in passing the Lunacy Bill, which last Session reached the House of Commons, there appears to be legitimate ground for prognosticating its passage into law during the present Session. The strong objection entertained by the Parliamentary Committee of the Association to some of its clauses, while fully recognizing the utility of others, remains unabated. As is well-known, the Committee have again and again urged their objections to the Bill, and their reasons have been stated as incisively as possible. The last opportunity afforded by the Government for the expression of the views entertained by the Association occurred at the time of the deputation to Sir Edward Clarke, the Solicitor-General, who at that time had charge of the Bill in the House of Commons. The marked attention with which he listened to the remarks make by the members of the deputation, and the clear grasp which he evidently had of the subject, favoured the hope that considerable modifications would be introduced into the Bill in the Lower House.

It is a matter of great regret, after such an interchange of opinion and friendly discussion, that the Bill subsequently passed into other hands, and there is no reason to believe that it will revert to those of the Solicitor-General. The more the probable influence of the Bill is considered, the greater is the conviction of those engaged in lunacy practice that the cumbrous forms which it is proposed to introduce to prevent the admission of persons not insane into lunatic asylums will render it increasingly difficult and exceedingly troublesome to place sufferers from mental disorder under prompt care and treatment. The forms at present required are frequently a complete obstacle to action being taken by the friends of the patient, and that this will be increased to a large and injurious extent scarcely admits of doubt. The mischievous interference with the power hitherto exercised by medical men of taking charge of single patients is a very dark blot on the Bill, and will still further jeopardize the patient's chances of being placed under other charge than that of relatives. In short, the whole tendency of the Bill

will be to keep lunatics at home at a time when it is essential to recovery that they should be removed from its associations. It will further have the effect of inducing the removal of patients from British care to foreign asylums, out of the reach of proper supervision. That the Bill possesses some good features is, we repeat, not to be denied, but it is not of practical importance to comment on these, but rather to criticize and condemn those which are opposed to the best interests of the insane and to the position which the medical profession ought to hold with respect to the determination of the medical question, whether or not persons alleged to be of unsound mind should be placed under control and treatment. A reference to the number of this Journal for July, 1887, will recall the objections to the Bill contained in the "Observations and Suggestions," issued by the Association. The number for July, 1888, contains the additional paragraphs prepared by the Committee prior to the re-issue of the document to Members of Parliament and others. The Presidential Address for 1887, by Dr. Needham, in the October number of the Journal for that year, contains a full statement of the objections in detail to the principal clauses of the Bill, of which we disapprove.

Some passages in Dr. Needham's Address are so much to the point, and so well put, that we reproduce them here:—

"Those who made the Bill have filled it with curious anomalies, but their one idea seems to have been constantly kept in view—that in the diagnosis of morbid states of mind, the non-medical class has, in its ignorance, a better claim to public confidence than those who have devoted the trained intelligence of their lives to the discrimination of such diseased conditions.

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"The basis of the Bill has been stated to be principally the recommendation of the Select Committee of 1877, but in many essential particulars it travels far beyond, and in others it departs widely from them. The principle of the Scotch procedure has been said to have been adopted with somewhat fuller elaboration of detail, but in the machinery which regulates that procedure are initial conditions which cannot be reproduced in any English Lunacy Bill. The Scotch sheriffs and sheriff substitutes, who are skilled lawyers of standing at the Bar, have no analogues in the English magistrates, who become so, not necessarily because

of their legal knowledge or judicial minds, but because they are respectable citizens with decided political sympathies, or in many cases, good business capacity.

"The primary and fundamental principle of the Bill is that in future no private patient shall be deprived of his liberty, either for his own benefit or the good of society, by an order under the hand of a friend or relative, and the certificates of two medical men, but that in every county and borough there shall be made a selection of justices, to whom petitions, supported by medical evidence, shall be presented. They are to consider the medical evidence of lunacy, and if they think fit, personally examine the patient.

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"Upon the magistrate is conferred the power, not of satisfying himself as to the *bonâ fides* and respectability of the medical certificates, and that the necessary legal requirements have been complied with, as in Scotland, but to decide as to the sufficiency of the medical facts adduced as evidence of insanity.

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"But there is one clause of which I have been hitherto unable to see either the need or any justification. It is to the effect that no person who is not temporarily insane only, or suffering from senile insanity, or desirous of voluntarily submitting to care and treatment, may be received into the house of a medical man as a single patient, except upon a special order by the Lord Chancellor, or a judge of the Supreme Court, in other words, unless he be a Chancery patient. I must confess my entire inability to understand the reason for this enactment. . . . Its chief incidence will be upon medical men in general practice, and upon the public which desires to avoid sending its insane relatives to asylums, but it will also deprive us of an excellent method of treatment in certain cases, and it is another indignity to the medical profession."

With Dr. Needham's criticism of the notices respecting the letter-writing of patients which the Bill requires to be posted in a conspicuous place in asylums receiving private patients, we conclude these extracts, again referring our readers to the Address itself:—

"These notices will act, in numerous cases, where rest and quiet are needed as the first elements of cure, as constant provocations, disturbing all the nice and pleasant relations

which ought to, and at present so frequently do, exist between the patients and those who have charge of them."

The revised Bill (issued Feb. 25) is very slightly altered, and in no instance are the clauses to which exception has been taken, expunged or modified.

County Councils and Pensions.

It is premature to forecast or discuss the probable action of the new County Councils, to whose care the county asylums are being transferred. Time alone will show the effect of the change.

We subjoin, however, the following remarks made by Dr. Murray Lindsay in the current annual report of the Derby Asylum, as being germane to the subject, in regard to which so many medical superintendents of asylums feel so deep an interest :—

"As the question of pensions has of late attracted considerable public attention—and perhaps there is no question upon which more erroneous ideas prevail—it may be of interest to rate-payers and others to know some important facts connected with the pensions granted to the officials of this asylum, which are taken from a summary recently prepared.

"The asylum has been in operation over 37 years ; the total number pensioned has been 23 ; the average length of service nearly 23 years ; average age on retirement 57 years ; number of pensioners deceased 12, being more than half the total, and 11 are still living ; the average length of service of the 11 surviving pensioners is 25 years, whilst the average duration of pension enjoyed by the 12 deceased was six years.

"Proportion of pension to (salary or wages and allowances) the total value of office.

Maximum of two-thirds	1
Nearly two-thirds	1
Slightly over a half	3
One-half	5
Under one-half	8
Less than a third	3
About a fourth	2
Total number pensioned	23

"These facts and figures speak for themselves, and are surely sufficient evidence that the magistrates, whilst simply performing a statutory duty in accordance with the Lunacy Acts,

by doing an act of justice to deserving and more or less broken down or worn out officials, and at the same time carrying out a sound and wise policy, have certainly not erred on the side of extravagance.

"In connection with this subject, it is important to record a resolution passed by the Committee of Visitors at their meeting on 5th May, when there were present Sir Henry F. Every, Bart. (in the chair), Sir William Evans, Bart., C. E. Newton, Esq., A. F. Hurt, Esq., W. C. Haslam, Esq., G. W. Peach, Esq., and B. Scott Currey, Esq. 'That in the opinion of the Committee it is desirable that all existing officers of asylums should have an assured right to a pension on a scale not lower than that provided by the rules relating to Her Majesty's Civil Service.'

"This resolution is precisely similar to resolutions passed by the Committees of Visitors of the West Riding Asylum, Wakefield, and the South Yorkshire Asylum, Wadsley, Sheffield, on 26th and 30th April last.

"When the pension question comes before the new County Councils, no doubt the claims of existing officers, as distinct from future entrants, will be carefully considered in accordance with the letter and spirit of sections 119 and 120 of the Local Government Act, 1888. In their consideration of this question, as affecting future entrants on asylum service, some assistance may perhaps be obtained from a perusal of the second report of the Royal Commission on Civil Establishments, 1888, which goes fully into the pension question, and contains some valuable recommendations, all in the direction of economy. Mr. E. S. Norris, M.P., has given notice to introduce a Bill in the House of Commons enabling County Councils to guarantee superannuation allowances to officers and servants in their employment, by providing a fund out of deductions from their salaries and wages. In considering the pension question, it is only right and just to weigh carefully and give special attention to the stronger claims of medical officers and attendants who are brought more immediately and constantly in contact with the patients, having more anxious and trying duties, and being exposed to greater risks, compared with other officers and servants whose duties are not so arduous or so trying. This is a point too apt to be overlooked. The asylum service, being more arduous and more trying than any other public service, deserves special consideration in the matter of pension, with regard to age on retirement, length of service entitling to pension, and proportion or amount of superannuation allowance."

The Suicide of Rudolph, Crown Prince of Austria.

Since the suicide of the King of Bavaria, another tragedy has called the attention of the world to the delirium of Princes. Apart from the irresistible interest which men take in the fate of those exalted in rank, there is another reason why the insanity of Kings should become an object of serious study. It is only by availing ourselves of the lives and deaths of regal and princely families that we can trace hereditary disease backwards through many generations so as to arrive at some safe generalization. It is, therefore, proper that there should be in this Journal an account of the recent suicide of the Crown Prince of Austria, viewed in those aspects which are especially interesting to us as students of mental disease.

Rudolph, Crown Prince of Austria, was born on the 21st August, 1858. He was the son of the reigning Emperor Francis Joseph and the Empress Elisabeth, the youngest daughter of Duke Maximilian, of Bavaria. Francis Joseph became Emperor during the year of revolutions, 1848, through the abdication of his uncle Ferdinand I., who had reigned thirteen years. His father, the Archduke Francis Charles, renounced at the same time his right to the throne. This prince, son of the Emperor Francis I., married Sophia, daughter of Maximilian, King of Bavaria. Thus by both his mother and grandmother the Crown Prince was descended from the house of Wittelsbach, of Bavaria. The exact reasons which induced both the uncle and the father of Francis Joseph to abandon their claims to rule over the Austrian Empire need not be here enlarged upon. The Emperor himself went through great trials and difficulties. From being an autocratic prince, resisting the liberal aspirations of his German subjects by military force, subduing the Hungarians by the aid of a Russian army, and ruling over Lombardy as an alien oppressor, he had the sense to recognize the force of events and the irresistible current of democracy. He became in time the constitutional ruler of his many states, and gained the hearts of his people through his moderation and wisdom and his unwearied attention to the duties of government.

The Empress Elisabeth, well known in this country for her independent spirit, her eccentricities, and her love of hunting and hard riding, is the sister of the Duchess of

Alençon, once betrothed to Louis II., King of Bavaria. It was announced about a year ago that this lady was under medical treatment for mental disease; we believe she has now recovered. It will thus be seen that the Crown Prince, the heir of one of the oldest and most splendid houses of Europe, had a neurotic strain in his blood. It is said that he prided himself on being descended from the Valois through Francis of Lorraine, the husband of the Empress Maria Theresa.

We have heard from a trustworthy source that during the Prince's boyhood his mental and moral qualities inspired his tutors with bright hopes. Gifted with a pleasing manner and address, he became very popular. He was a good linguist, as befitted one destined to rule over so many nations, speaking various languages. He was fond of the society of artists, musicians, and men of science and letters. He used to preside at scientific assemblies, and was given to writing articles, which were sent to journals without his name, and, therefore, not always inserted. Had he kept up this rule of writing and publishing anonymously he would probably have become inured to disappointment which might have been good for him in the long run. In 1881 the Prince published in his own name a book, entitled "Fifteen Days on the Danube," and in 1884 he brought out a more important work, "Die Orient Reise,"—travels in the East. He commenced a serial, "Austria-Hungary in Word and Picture," of which seventy-eight numbers have already appeared. A gentleman writing from Vienna says: "There is no truth in the many newspaper reports which speak of his marked intellectual ability. His writings owed their main value to a careful and well-paid editing, but he was by no means a dull and stupid man."

Attached, as a matter of course, to the army, the Crown Prince paid some attention to military affairs, and was a daring rider and unwearied in the chase.

Unhappily the Prince did not remain content with such blameless pursuits. "All these pleasing features," writes the gentleman already quoted, "were overshadowed by the outstanding and ruling tendencies of his life, plainly revealed in a constitution, naturally robust and wiry, much broken down, and a nervous system shattered at the age of thirty." We have farther the testimony of a man, who had good means of observing and is a most capable observer, that for years back the Prince had shown a spirit and sentiments

characteristic of an unbalanced mind, "*mal equilibrés.*" From the photographs it appears that Rudolph had a fair complexion, light hair, a handsome face, and regular features. The eyes are deep or sunk; the ears large. The forehead is large compared with the face, and wider above than below. The figure looks well in his handsome Hussar uniform, but it seems as if the bust were made up by the art of the tailor, having become emaciated or never being well filled up. The legs are not very well shaped. He was married to the Princess Stéphanie, daughter of Leopold II., King of the Belgians, by whom he had one daughter. The union was not a happy one. The Prince was unfaithful, and is believed to have squandered a great deal of money on his favourites.

It is stated that the doctors were of opinion that there was no probability of the Princess having any more children. Some time towards the close of last year Rudolph met in her mother's house the Baroness Marie Vetsera, a beautiful girl of an old Czech family, with whom he speedily fell in love, and who returned his passion. In order to be able to marry the young baroness, the Prince openly proposed to his father that the Pope should be asked for a divorce, which the Emperor resolutely refused. It is even said that Rudolph himself wrote to the Pope asking for a divorce, urging that there was no chance of the Princess Stephanie giving him an heir. This was the cause of heated altercations between the Emperor and the Crown Prince. The Princess Stephanie showed a jealousy for which there was too good a cause. On the afternoon of Monday, 28th of January, the Crown Prince drove from Vienna to Meyerling in a hired two-horse coach, taking with him the Baroness Marie Vetsera. He was joined soon after by Prince Philip of Coburg and Count Hoyos. On the Tuesday, the Crown Prince stated that he wished to remain indoors as he had caught cold, but soon after went out shooting with his two guests for some hours. It is stated that a huge stag fell to his gun. He sent the Prince of Coburg to Vienna with an apology for not going to Court to attend a family dinner. Apparently, the Prince of Coburg returned to Meyerling in time to be at the supper on Tuesday evening. At night the two guests left the house. Johann Loschek, Rudolph's valet, said that the Prince came half dressed out of his bedroom early on Wednesday morning, and told him to go to order a carriage for a shooting excursion. As arrangements had already been made for this being done it is supposed that the Prince's

design was to get the man out of the house. This was about seven o'clock. When Loschek came back he knocked repeatedly at the door, and as no answer came he got alarmed, when he went for the Prince of Coburg and Count Hoyos. They got into the bedchamber by forcing the door of an adjoining room. They found the Crown Prince lying dead in his bed with a revolver near his hand. A looking-glass with a lighted candle beside it had been so placed that the Prince could see his face so as to guide his hand to direct the fatal pistol wound, which was in the right forehead. "Beside him lay the corpse of Baroness Vetsera, a young girl not yet eighteen years of age, laid out as if for burial with flowers on her breast, and shot through the heart. The supper-party in the shooting lodge the previous evening had been a very jovial and hilarious one. Prince Philip of Coburg and Count Hoyos were present. They had no suspicion of what was coming. The handsome and vivacious girl made all present bright and lively throughout the evening. Last year she was frequently met with in London society."

This last paragraph is from the letter by the gentleman already quoted which appeared in the *Scotsman*. The first idea was to hush up this terrible event; and the official publication of the real cause of the Prince's death was owing to the refusal of the Court physicians to sign a declaration that he died from failure of the heart's action, and the unwillingness of Tisza, the Hungarian Premier, to announce to the Chambers any misleading statement about the Prince's suicide. It was several days later that the ghastly tale that there were two dead bodies found in the Prince's room was published in foreign newspapers. As yet few details have come to light, and these perhaps not very trustworthy. According to some statements in the journals, the Prince of Coburg only returned from Vienna very early on the Wednesday morning, and thus could not have been present at the supper of the night before.

Shortly before his death the Crown Prince had written letters to his father, his mother, his wife, the Archduke Otho, and the Prince of Braganza. Some of the contents of these letters were given in the *Neues Wiener Tagblatt*. Writing to his father, he asked in touching terms for forgiveness for the act which seemed to him inevitable; and in the letter to his mother the Prince is said to have given a detailed explanation of his motives for seeking his own death.

The other letters principally dealt with the disposal of his property. One undated letter written by Rudolph has been given in the *Standard*, translated from the Hungarian. It runs as follows :—

Dear Szögyenyi,—I enclose my codicil. Act upon it, as well as upon my will, which was drawn up two years ago with the consent of my Consort. A small table stands in my study in the Hofburg, near the sofa. Please open the drawer with the enclosed gold key. You will find some papers, which, after you have arranged them, you may set aside for publication according to your judgment. I must part from life. Remember me kindly to all my good friends and acquaintances. I wish you all happiness. May God bless our beloved Fatherland.

Rudolph.

The examination of the Crown Prince's body was made in the Hofburg, at Vienna, on the 31st of January. It lasted nine hours. The details have not been published. The following report is taken from the "British Medical Journal" :—

1. His Imperial and Royal Highness the Illustrious Crown Prince succumbed owing to destruction of the skull and the anterior parts of the brain.

2. This destruction was caused by a shot discharged quite close to the right anterior temporal region.

3. A shot from a pistol of medium bore was capable of producing the above-described lesion.

4. The bullet was not found, as it had passed out through an aperture above the left ear.

5. There is no doubt that His Imperial and Royal Highness shot himself, and that death occurred immediately.

6. The premature union of the coronal and sagittal sutures of the skull, the remarkable depth of the cranial fossa, and the "impressiones digitatæ" on the internal surface of the cranial bones, the distinct flatness of the cerebral convolutions, and the dilatation of the cerebral ventricles were pathological conditions which, according to general experience, are combined with abnormal mental conditions, and thus justified the supposition that the fatal deed was committed in a state of mental alienation.

(Signed)

Hofrath Dr. E. Hofmann, m. p., Professor of Medical Jurisprudence.

Professor Dr. Kundrat, m. p., Director of the Pathologico-Anatomical Institution.

Professor Dr. Hermann Widerhofer, m. p., Physician in Ordinary to the Imperial and Royal Court.

These appearances, though abnormal, are not very significant. They are of a chronic character, and do not indicate any sudden outburst of insanity which, perhaps, might not leave any recognizable traces, especially after the derangement of the vascular conditions from the passage of a bullet through the brain. In reference to the ventricles observed to be full of fluid and the compressed condition of the brain surface, we have to recall the shape of the head—broadest at the upper portion of the forehead, which suggests the former existence of some degree of hydrocephalus. It is said that the Prince complained of headache which followed a fall from his horse last November, but he does not appear to have consulted any medical man on this account. Two years and a half ago, when returning from the funeral of King Ludwig of Bavaria, the Prince said to some intimate friends, "I fear that my end will be as his." It was said that Rudolph used to talk gloomily of death, and of late took a morbid interest in the suicide of a man named Kegl. It thus appears that the idea of committing suicide had long dwelt in his thoughts, and that a few days before his death it had gained full possession of his mind. It was probably executed in a moment of gloom and depression. It is said that the mother of the young baroness received a letter saying that she and Rudolph had resolved to die together. The whole truth is not known to the public. A long telegram was sent to the Pope by the Emperor Francis Joseph, which must have induced the Holy Father to believe that the Prince was insane at the time of his death, for he was buried in the Capuchin Church, the last resting-place of the Hapsburgs, with all the rites of the Catholic faith, a nuncio, cardinals, and bishops being present. Requiems for the repose of his soul were chanted in many churches of Europe. It was noted, however, that several priests in Austria refused to join in the masses, and that in some places the church bells were rung in spite of them. There are some people who think that the act of self-destruction shows such a perversion of natural feeling that it may be held as in itself a proof of insanity; and there is no doubt that a large proportion of suicides are insane. Nevertheless, we do not hold that what Cato did, and Addison approved, and Goethe surrounded with poetic sentiment is in itself a proof of madness. We ought to look at the antecedents of the suicide and his religious views. For one suffering without hope, who believes death to be the last and thorough opiate

to misery, it does not seem so unreasonable an action; though so strong is the love of life and so indestructible is hope in the human breast that even amongst such materialists, most of them will still continue to bear on their burden to the end. But how can we conceive the heir of the Austrian Empire, a young man of thirty, to be in a condition so utterly forlorn that he could thus rush away from all his splendid prospects because he could not get a divorce from his wife in order to marry a mistress of whose heart and person he was already the possessor?

Everything made smooth for him from childhood, servilely flattered by the creatures who go about Courts, all his wishes anticipated, all his caprices gratified, the Prince, who now, perhaps, for the first time felt the full force of a love passion, was suddenly brought to face a limitation to his power and a check to the flow of his dearest wishes. This produced a revulsion of feeling, the wild intensity of which the one brought up amongst the losses and crosses of the world cannot conceive. One lesson the princes of Europe might learn, and that is to give up these close, dynastic marriages, which, instead of producing a race fitted to rule over men, seem calculated only to perpetuate and intensify hereditary diseases which exist in every princely family in Europe.

PART II.—REVIEWS.

Mental Evolution in Man—Origin of Human Faculty. By George J. Romanes, M.A., LL.D., F.R.S. Kegan Paul, and Trench. 1888.

First of all we welcome this book as a development in the right direction. The study of mind is no longer to be left to the introspective philosopher, but is to be studied by the painstaking scientific observer, who approaches the subject unweighted by the speculation of past ages. For some time past, both on the Continent and in England, there has been progress made in the collection of facts as to the development of mental faculties in childhood, as well as in the comparative study of their growth in animals. Darwin early showed his scientific spirit in recording regularly and carefully the evidences of mind-growth as seen in his

children, and his first careful study of this kind was published by him in "Mind" many years ago. Since then the English edition of "The First Three Years of Childhood" by Perez, further called attention to the subject, and Max Muller's ponderous volume on "Science and Thought," added to the literature of the subject, and by questioning the methods of the scientific observer, led to a great deal of more or less heated controversy. In Germany, as might have been expected, much useful work has been done, and in the book under consideration we have the very clearly expressed opinion of Mr. Romanes as to the methods of observation and the amount of work yet to be done.

Our author has a very strong individuality, and impresses this upon his work; he has very definite ideas on subjects, and is hardly able to accept the opposing views of others. To his own satisfaction he demolishes the theories of his opponents and does not leave them a leg to stand upon. It appears, however, that these same enemies have a remarkable power of recovery, for they have already begun to assail their truculent foe. Romanes has collected most important facts, and has arranged them in a clear and definite way, so that whether he has made out to the satisfaction of others all that he believes himself is not after all so very important. The book contains facts and theories, and we find the facts are much the more interesting. There are stories and anecdotes about animals, and also about the author's children.

Everyone has his own parrot and dog stories, and it requires great care to prove all things and hold fast to those which are true. We are all ready to accept as reason in our own dogs or babies what would be looked upon with suspicion if recorded of the belongings of others. In carefully reading the stories of Romanes we are quite prepared to accept them, for many more marvellous ones were recorded by Dr. Lauder Lindsay in his book on "Mind in the Lower Animals," and in more than one instance we personally know the animal and could vouch for his intelligence. As to the theories, we shall have to take these up in some detail, though the limits of a review prevent us giving more than an outline sketch.

The problem before the author was really this: Is there any essential difference between the mental faculties of animals and those of man, or is the difference only one of degree? If the difference is only one of degree, where is the line of distinction to be drawn—at what degree does animal intelligence stop? And next, and most important, to what is it due that

in the one case, human development can go on to an almost unlimited extent, while in animals this progress soon ends? The book before us naturally divides itself into the two parts, human and animal development.

First our author is concerned with proving that there is no essential distinction between the faculties of animals and those of man. His chief argument is that the mind of a child in developing passes through exactly similar stages to those seen in lower animals, and that this is practically admitting that what is development in one is equivalent to the development in the other. This is the same argument which has been used so much since the advance in embryology has shown that as the human embryo in its development passes through stages resembling lower animals, it is probable that in attaining its present stage it has grown out of these. The argument is worth as much in the one case as in the other.

One chapter is concerned with the reputed differences between man and the brutes, and our author begins by asserting the *à priori* probability of mental evolution, from the facts of individual mental evolution in man from childhood, and the parallels between human and brute intelligence, as well as from the development of the human race.

He shows that the lower animals exhibit the various powers and mental faculties in ways similar to man, and besides proving the presence of these faculties he gives evidence that animals have power of inferring and reasoning.

He makes the startling statement that no negro has executed one stroke of original work in any single department of intellectual activity, and that power of originating is not an essential distinction between brutes and man. Men may remain for ages undeveloped on the one hand, and animals may make advances from generation to generation, birds and mammals accommodating themselves to changing conditions. One by one he discusses the distinctions which have been considered as essential between the minds of men and animals, and to his own satisfaction destroys them. He accepts that there are great differences, as seen in cooking, barter, clothing, and the like, yet these habits only exhibit differences in degree of intellectual power and not in the quality.

In Chapter II. the subject of Ideas is studied, and in some ways this is the most characteristic part of the book, as in it Romanes propounds his theory of Recepts. The faculty

of ideal abstraction furnishes the *conditio sine quâ non* to all grades in the development of thought. Throughout the growth of more complex relations of ideation it is *development* that is seen; the faculty of abstraction is everywhere the same in *kind;* this development is everywhere dependent on the faculty of language. A distinction is made between the abstraction independent of language, and that which is so dependent. In making such a distinction he at once is opposed to Max Müller, who will allow no thought to occur without language.

Simple ideas or Percepts he understands to be the mere memory of particular sensuous perceptions.

Compound ideas are the combinations of simple, particular, or concrete ideas into that kind of composite idea which is possible without the aid of language.

General ideas, concepts or notions, are the kind of composite idea which is rendered possible only by the aid of language or by the process of naming abstractions as abstractions. The first are percepts, the second *Recepts,* and the last concepts, and our author is very full and particular in pointing out the necessity for the term Recept. He defines recepts as spontaneous associations formed unintentionally, as what may be termed unperceived abstractions. We all recognize the use of the term percept, and can follow that when we have named a general idea or notion that it should be considered a concept, but one has to think a little before accepting the term recept; and yet very much depends upon it, and as fully discussed by our author it seems that (though he is not as he fancied the originator of the term or the theory) he has developed it and made wider use of it than others. A series of similar impressions are perceived to be similar before their general likeness is abstracted and named, and this undefined state is called the receptual. Our author points out how a similar state is present, not only in the sensuous, but that, in the more intellectual level, undefined judgments as well as sense impressions occur. This receptual state is shown to be one of the stages of development, and as such, bears a most important place in the whole argument. The point which is to be proved is that in the process of generalization there is in the first place the perception of two or more objects—percept; in the second place, the feeling of their resemblance—recept; and lastly, the expression of this common, relative feeling, by a name afterwards used as a general name—concept; and

the whole question is, is there a difference of kind, or only of degree, between a recept and a concept?

Whether Mr. Romanes has solved this question depends, to our thinking, on the person who requires to be satisfied. The metaphysician is not satisfied, and the majority of scientific men did not need so much metaphysical argument to prove what they already accept. All readers will enjoy the more concrete proofs of animal intelligence, and can interpret them to their own satisfaction. We should like to have relieved this review by telling some of the tales if time and space had permitted.

It seems to us impossible to draw any distinction between percepts and recepts, for nothing is known except by comparison; which means that early sense impressions appear to be lost till they are repeated, or till similar impressions recall the first percepts, and this is surely what is meant by recepts. This bears out the generally received idea that particulars have to be learnt later than general or compound ideas.

Much depends on this, as later in the book it is pointed out that probably in the origin of speech general ideas are the first to arise, and not particular definite ones.

The study of the logic of recepts is followed by the study of the logic of concepts, and it is pointed out how, with advance, the same processes of abstraction, with the use of higher recepts, come into play, the whole being shown to move in a steady uniform way till, as we shall see later, a time comes when progress would have stopped but for the power given by language to advance in this more abstract path.

"A sign," as Sir W. Hamilton says, "is necessary to give stability to our intellectual progress—to establish each step in our advance as a new starting point for our advance to another beyond. . . . Words are the fortresses of thought. They enable us to make every intellectual conquest the basis of operations for others still beyond." Romanes in this chapter attacks Max Müller's dogma as to the impossibility of thought without words, and, among other arguments, points out that as in some forms of aphasia the patient has lost every trace of verbal memory, yet his faculties of thought may, for all practical purposes, remain. We are induced to think that in many cases of aphasia, though the power of expression is wanting, language exists in the mind all the same. Romanes concludes that although language is a needful condition to the original construction of conceptual thought, when once the building has been completed the scaffolding

may be withdrawn, and yet leave the edifice as stable as before. On all hands it is agreed that the one and only distinction between human and animal psychology consists in the former presenting the faculty of speech.

In Chapter V. Language is considered, and we think this is one of the most interesting chapters. Mivart's classification is followed. We may altogether distinguish six different kinds of language :—

1. Sounds which are neither articulate nor rational, such as cries of pain, or the manner of a mother to her infant.

2. Sounds which are articulate but not rational, such as the talk of parrots, or of certain idiots, who will repeat without comprehending every phrase they hear.

3. Sounds which are rational but not articulate. Ejaculations by which we sometimes express assent to or dissent from given propositions.

4. Sounds which are both rational and articulate, constituting true speech.

5. Gestures which do not answer to rational conceptions, but are merely the manifestation of the emotions and the feelings.

6. Gestures which do answer to rational conceptions, and are, therefore, external but not oral manifestations of the *verbum mentale.*

Romanes would add a 7th, including all kinds of written signs. In this review it must suffice to point out these visions, and to say that the evidences of their existence is carefully traced in infants at various ages, and in different classes of animals, so that it is shown that for a long time at least the language of the developing child and that of the animal are the same, and that the difference later is only one of degree, *q. e. d.* The difficulty is expressed when our author says:—"The case, however, is different when we arrive at conventional signs, for these attain so enormous a development in man, as compared with animals, that the question whether they do not really depend on some additional mental faculty, distinct in kind, becomes fully admissible." The whole case, however, appears to be this, that as long as no general conceptions are formed, no real progress can be made, and that the development of general ideas is in direct relationship to the use of abstract signs. The savage can only count up to the number of his fingers, and the boy is content with his simple rules of arithmetic, but the astronomer would be

powerless without a complicated set of arbitrary mathematical signs.

Tone and gesture, as related to language and its growth, are next considered, followed by a study of articulation under the following heads:—Articulation by way of meaningless imitation; 2, meaningless articulation by way of a spontaneous or instinctive exercise of the organs of speech; 3, understanding of the signification of articulate sounds or words; and 4, articulation with an intentional attribution of the meaning understood as attaching to the words. Many interesting facts as to the relationship of animals to speech are given, and form a pleasant relief to the more heavy reading. The now famous sayings and doings of Dr. Wilks' parrot, which appeared in this Journal, are referred to, and only confirm any open-minded person in the belief that the differences between the minds of animals and those of man are only of degree. We certainly do not yet understand why some—not the highest intellectually—of the lower animals speak and understand speech, yet other animals, higher in the scale, are more backward.

But already this review is exceeding the ordinary limits, and we must hastily notice only a few more of the characteristic features of the book.

A most elaborate study of classification of languages is made, showing the improbability of all languages starting from one stock, and also pointing out the gradual and apparently parallel methods of growth in these modes of communication, all these facts being used to impress the idea that the order of Nature is gradual development in all directions, both of the lower and the higher parts of man and animals.

Just as in the earlier part of the book Mr. Romanes is willing to fight all comers as to the utility and importance of recepts, so is he willing to defend his point in favour of self-consciousness as the one advance made by the human infant upon the lower animal mind.

He maintains that the child is able to generalize further than, say the parrot, and is able to see not only the likeness of varieties of dogs, but also the likeness in a picture or an image, and further that a child recognizes a truth as true, while an animal only recognizes the similarity of truth.

When, in Chapter X., Self-consciousness is considered, our author becomes quite eloquent, and we quote his opening statement:—"My contention in this chapter will be that

given the protoplasm of the sign-making faculty, so far organized as to have reached the denotative stage; and given also the protoplasm of judgment, so far organized as to have reached the stage stating a truth without the mind being yet sufficiently developed to be conscious of itself as an object of thought, and, therefore, not yet able to state to itself a truth as true; by a confluence of these two protoplasmic elements an act of fertilization is performed, such that the subsequent processes of mental organization proceed apace, and soon reach the stage of differentiation between subject and object." This is the creed of self-consciousness, according to Mr. Romanes, and on the existence of self-consciousness much depends.

We are quite prepared to admit that self-consciousness is a very human faculty, just as cooking and clothing are, but there seems to us to be the usual limit to human explanation here, which is met with in every branch of knowledge. The earth may rest on the elephant, and the elephant on the tortoise, but what is the real foundation? And so with the basis of mind, whether it occur in man or brute, there is something which is not to be comprehended by us. Mr. Romanes himself is quite prepared to admit this. We cannot allow that self-consciousness is really absent in the lower animals, and, therefore, hardly care to follow the subject further, though many passages of interest have been marked for quotation. In Chapter XI. the transition in the individual is studied. Language and its relations receive special consideration, and it is really surprising the amount of general, as well as special, work which has been collected to the support of the author. We pass over the chapter on sorts of languages and the varieties of tongues, and will only briefly refer to the discussion on the origin of language. We are certainly in agreement with Mr. Romanes in thinking that the first words used were what is called sentence words, *i.e.*, expressions which were not mere names of things, but implied much more, that they were like baby words, as a child might say "up," meaning "take baby upstairs." So the savage with gesture and an expression meant a great deal more than his word expressed.

The gesture part of language receives careful study, and opposing theories receive hard blows. For our part we think that Mivart's classification really points to the origin of words. The emotions—love and anger—were probably much sooner expressed by voice than the naming of things.

Adam and Eve were in love before they gave names to the brutes; at least, we fancy so. The lower animals express their emotions vocally, and it seems certain the development of man's intellect started from some higher power of expressing emotion. Once given the power of speech and gesture, communication and the progress of the race was certain. The transition in the race is followed, and a good summary of the points to be considered closes a book which should be read by all interested in psychology.

We cannot say we accept the author as a leader in all the many branches of science which he explores, but he has opinions on them all, and he is not afraid of asserting them. The fact that most thoughtful men refer to this book speaks for the position it at present holds.

Om Hypnotismens användande i den praktiska Medicinen. By Dr Otto G. Wetterstrand. Stockholm, 1888.

The above-mentioned publication is, with the exception of Bernheim's standard work,* one of the most noteworthy of the productions issued of late on the subject of Hypnotism and Suggestion. The literature of Hypnotism has become voluminous (witness the "Bibliografie des modernen Hypnotismus," by Max Dessoir), but a large measure of what has recently been issued on this subject is merely an outcome of Bernheim's investigations, which have wrought a complete change in the explanation and development of this science, and which can in no way be ignored by any who intend further to extend the study of Hypnotism. Many such publications contain nothing but variations of the well-known experiments on susceptible subjects at the hands of Charcot, Preyer, and Heidenhain; while others give merely contributions of one or two startling recoveries, the writers not being sufficiently imbued with the meaning of Suggestion to estimate the theoretical worth of their experiments at their proper value. No longer is it necessary to demonstrate the possibility of such cure, but the question Wetterstrand puts himself: How can we more closely establish the therapeutical value of Suggestion, and verify the results obtained by Bernheim? remains to be worked out. In January, 1887, after a visit to Nancy, he com-

* Reviewed in this Journal, Jan., 1889.

menced his investigations at Stockholm. At the present time he can speak authoritatively as to his experience of 718 cases. The results obtained by Bernheim have been confirmed by him in every particular. *Out of the* 718 *patients coming under his individual observation* 19 *only were not susceptible to the Hypnotic influence.* The neuropathic status of the inhabitants of Stockholm seems, therefore, in no way different from that exhibited by the people of Nancy, Prof. Ewald's recent strictures notwithstanding. The Swedes being of as pure a Germanic descent as the Germans themselves, the theory promulgated by v. Nussbaum ("Neue Heilmittel für Nervenkrankheiten") as to the immunity of the Germanic race to the influence of Hypnotism must, therefore, be discarded. According to Wetterstrand's experience, neither neurotic predisposition nor sex affect in any way the susceptibility to the Hypnotic influence. In degree, however, a variety is obtainable where individual character and period of life are taken into consideration. Children he found to be invariably susceptible, but after the thirtieth year the susceptibility commences slowly to diminish; at advanced periods of life the condition is again the more easily induced. Unfavourable sequelæ have never been observed by him. In one or two instances patients have on awaking complained of an unwonted and strange feeling of cold or heat—a passing Suggestion at a subsequent *séance* caused these inconvenient symptoms to disappear. The drowsiness which at times followed the first subjection to the Hypnotic influence was dissipated in like manner. The following maladies were treated by the author with Hypnotism and Suggestion:—Nervous headache, neuralgias, spinal cord affections (tabes dorsalis), epilepsy, chorea, spasmodic muscular twitchings, stuttering, neurastheniæ, various forms of psychosis, hysteria, amblyopia, nervous deafness, alcoholism, anæmia, rheumatism, hæmorrhages, phthisis pulmonalis, heart affections, gastric disturbances, diarrhœa, Bright's disease, incontinence of urine, vesical neuralgia, diseases of children, anomalies of menstruation, contusions, etc.; and, lastly, Hypnotism has been employed by him to induce anæsthesia for minor operations and in childbirth. This list does not agree with the popular conception as to the influence of Hypnotism. Many medical men who still hold the opinion that only in hysterical affections and functional neurotic maladies is success to be encountered by the employment of Hypnotism and Sugges-

tion, will on theoretical grounds regard such a development of "psycho-therapeutics" as an impossibility. But Wetterstrand's experience, even as that of other investigators (Forel, Fontan, Séquard, Voisin, Delbœuf, Holl, Semal), gainsays this, and confirms the results obtained by Bernheim. Only one case of pure hysteria has been treated by the author. On the other hand, he witnessed in patients suffering from organic ailments a repeated and exceptionally beneficial influence. In heart disease he obtained by Suggestion an improvement in the heart's rhythm and action, which he demonstrates graphically by means of a curve. Brilliant results were apparently obtained by him in the anæmic state, such as is found in women suffering with leucorrhœa and dyspepsia, and he emphasizes his success by advising any of the medical profession who intend working out this "suggestive practice" to commence with cases such as these. In cases of Bright's disease also the beneficial effects of this new method were unmistakable. This agrees with the experience of van Renterghem and van Eeden, both of whom report the speedy dispersal of the œdema pathognomonic of the malady even when it had advanced so far as to threaten life, and where every other remedy had failed. From this he concludes that "psycho-therapeutics" will find its largest application in functional neuroses when we confine the power of Suggestion to such very narrow limits. He treated 74 patients suffering from various forms of nervous headache, and of these he cured 65. The very favourable results obtained thus may be due to the fact that the majority of his patients belonged to the lower, less-cultivated section of the community, for other experimenters have failed in giving benefit in this particular affection, notwithstanding that a state simulating deep somnambulism —the third of Charcot's phases of "grande hypnose"—was induced. The complete state of Hypnotism, as well as its therapeutic effect, appear to be more difficult of acquisition the higher the mental development. Twenty-six patients affected with stammering were brought under influence; of these ten were permanent cures. In one particular affection Wetterstrand, in common with other observers, has found this method of treatment unfailing, viz., in nocturnal incontinence of urine in children. We may, seeing the extreme difficulty of management of such cases, regard this as an important aid to future treatment. In alcoholism his results have not been so favourable, but stand on a par with

those of Forel (*cf.* "Revue de l'Hypnotisme"). The beneficial effect of Suggestion in cases of tabes dorsalis, epilepsy, fully-developed psychoses, and neurastheniæ was but slight; he attributes this to the extremely developed stages of these various maladies. In locomotor ataxy we shall probably never be able to gain a greater success than a temporary mitigation of the pain attending various crises. Epilepsy, however, of the petit mal type and incipient attacks of the less unfavourable forms of psychoses have been treated most satisfactorily by Suggestion, not only by Wetterstrand, but also by van Renterghem, van Eeden, and others. His experience in various neurastheniæ has not been so happy as that recorded by other writers, who appear to have been fairly successful in their treatment of these. Asthma of nervous origin, the morphia habit, hysterical aphonia, paralyses, and muscular contractions, which other recent experimenters have favourably dealt with, do not appear to be included in his list. With regard to the theoretical aspect of Hypnotism and Suggestion, Wetterstrand gives us little that is new. Facts, however, it may be granted, are of primary and paramount importance in the consideration of these as therapeutic agents. Following Bernheim, he demonstrates two noteworthy experiments as to the dependence of the phenomena of transference and the hystero-hypnotic state of Charcot, on Suggestion. A patient was placed in the hypnotic state, and that part of the cranium, subjacent to which lay the motor centre for the arm, touched with a magnet. Thereupon muscular contractions ensued in the opposite upper extremity; catalepsy of the left arm was induced by bringing the magnet in contact with the right, etc. When, however, in place of the magnet a stethoscope or roll of paper was used the same occurrences followed. All these phenomena were designedly induced by indirect Suggestion, by causing the patient to comprehend that such were expected and that they were of necessity to appear. The notorious experiments of Luys, of Paris, as to the "action des médicaments à distance" have, as is well known, suffered the same fate, and have by the same process of investigation been robbed of all their marvellousness. Not sufficiently impressed as to the influence of Suggestion, Luys, in the hearing of his hypnotised subject, pointed out the possible effect of his experiment, and then assumed as a mysterious power for his medicament what was nothing else than the involuntary Suggestion of the experimenter.

Diseases of the Nervous System. By J. S. Bristowe, M.D. Smith, Elder, and Co. 1888.

In this volume Dr. Bristowe touches upon a number of most interesting problems. Many of these do not lend themselves to discussion here, but others are taken from that borderland which alienists may claim as common property, and yet others belong more strictly to the alienist.

Of those which may be classed as "borderland," are the problems—shall we not rather call them puzzles?—which hysteria is constantly bringing before us. With these Dr. Bristowe deals in a series of chapters, and he there presents us with some of the more uncommon manifestations of hysteria, and he also gives us a few hints as to the views he holds on this intricate subject. The first chapter of the book is headed "Hysteria and its Counterfeit Manifestations." Dr. Bristowe describes a case of aphemia occurring in a hysterical subject, and from the course of the case he is led to the conclusion that the aphemia itself was functional, and "presumably, therefore, hysterical." On this he comments—

> But aphemia is rare as an item of hysteria. At any rate I have only once before met with it in a definite form, while aphonia is common. And yet, when one considers the nature of the nervous disturbance by which aphonia and aphemia are respectively caused, and the close functional relationship there is between these two factors of speech, it seems odd that aphemia should not be a more common outcome of hysteria, and more often associated with hysterical aphonia than it is.

It does seem odd, and yet we may remember that, whilst aphonia still permits the outpouring of those numberless bodily griefs which are the patient's, and even adds a further element which claims our pity, aphemia would to a large extent cut the patients off from the sympathetic world.

Perhaps that same mysterious instinct which causes the hysterical patient to avoid the more unpleasant details of the particular disease which is being counterfeited, *e.g.*, the biting of the tongue and the serious contusions, etc., which befall the true epileptic, perhaps this same instinct preserves to the hysteric the luxury of descanting on her (or his) troubles.

Chorea—is it hysterical? Dr. Bristowe asks. He concludes that it may form "part of the hysterical programme," and points out how often "rhythmical and convulsive movements of various kinds attend hysteria." On this subject we would refer to a monograph entitled "Des Chorées," by Dr. Maurice Lannois.

But phonation and articulation and the movements of the limbs are so clearly at the mercy of the will, that we readily accept hysteria as an explanation, possible, when other attendant symptoms suggest it. Much more incomprehensible are those cases in which mechanisms which have long since become automatic are at fault. We do not refer here to symptoms of dyspnœa or of palpitation and great frequency of pulse, interesting as they are, nor even to vomitings and chokings, difficult as may be their explanation, but to those cases in which there is perversion of a reflex, which has become organized through ages, such, for instance, as that which regulates the temperature of the body. It is where such a mechanism becomes upset without evidence of organic disease that hysteria appears in all its obscurity. Hysterical pyrexia is, however, recognized by the best authorities. Equally strange are those cases of paralysis affecting one of a group of muscles (which group has become organized into one functional whole) occurring in patients suffering from other symptoms which suggest hysteria. Dr. Bristowe describes three such in Chapter V., entitled "Cases of Functional Ophthalmoplegia," etc. It is true he does not quite give in to the hysterical theory, yet he is inclined to regard them as functional. After all, the entire question hinges on the definition of "hysteria," as Dr. Bristowe admits. On this point we find in Chapter I., p. 27, an outline sketch of the view he takes of many functional diseases, "among which may be included insanity in its many forms, epilepsy in its many varieties, chorea, megrim, neuralgia, and hysteria." He points out that these several diseases claim individuality by virtue of the definite grouping of their symptoms rather than by the character of any one of the symptoms composing the groups —

> The individual symptoms which, by their mode of aggregation, constitute the several diseases as we know them, are common more or less to all of them; many cases occur in which it is difficult, if not impossible, to determine satisfactorily in which category they shall be placed; and, indeed, as it seems to me, there is no substantial line of demarcation between the diseases.

We would gladly quote the two concluding paragraphs had we space.

In the diagnosis of hysteria we are inclined to attach so much importance to the presence of emotional disturbance that it is essential that we should recognize, with Dr. Bristowe, 1st, that emotional disturbance is a very common accompaniment of grave organic disease; and, 2nd, that in genuine functional (hysterical?) disease "there may not be, and there may never have been definite discoverable emotional disturbance or tendency . . . and, indeed, the manifestations of the disease may be limited, so far as I know, to an attack of neuralgia, to painfulness and tenderness of a particular organ, to paralysis or spasm of a single muscle or group of muscles, or to some functional disorder of a single viscus."

In respect of some of the cases of functional pyrexia, the high temperatures were in connection with epileptic seizures, and preceded immediately the convulsions. Dr. Bristowe suggests whether these pyrexial attacks may not be of the nature of "*heat aurœ.*"

In Chapter VI. a very interesting case of aphemia, cured by education of the organs of articulation, is recorded.

We must pass on to one of the later chapters, XXIV., on "The Early Recognition of General Paralysis of the Insane," and the relations between this disease and tabes dorsalis and disseminated sclerosis. This chapter strikes us as rather meagre. Dr. Bristowe points out the two types of general paralysis now definitely recognized, the one with abolition or deficiency of the deep reflexes, the tabetic type; the other with excessive reflexes, which he describes as the disseminated sclerosis type. Should not the latter be described rather as the lateral sclerosis type, since the contrast is in respect of a definite symptom, which we refer to the lateral columns, as against disease of the posterior columns in the former case?

We must apologize for the rather frequent quotations from the text, and for the restriction of the criticisms to one section of the book, that dealing with functional disease. This subject, however, is so important, and concerns so specially the alienist, that the apology is perhaps hardly called for. Dr. Bristowe is to be thanked for dealing with this vexed question, and for his consideration of other obscure affections.

The Life-Register. West, Newman, and Co., Hatton Garden, London. 1888.

We draw attention to this little volume, the profits arising from the sale of which are to be handed over to the support of a Memorial Holiday Home for London children and the development of a Village Museum, both at Haslemere. A short preface by Mr. Hutchinson states the object of the Register to be that of assisting persons to keep an orderly record of their state of health, personal events, pursuits, and attainments. It is hoped that the higher object may be attained of increasing "the perception of the dignity of living and of the important relations of the several parts of a life to its sum." The Register is not a copy of Mr. Galton's Album, having in fact been prepared long before the latter was published. "It is believed that its great simplicity will render it more acceptable to those for whose use it was designed, and will thus justify its publication."

In the concluding "Memoranda as to the Management of the Health," it is recommended that "those who cherish a laudable desire to attain longevity should cultivate a good temper and a happy frame of mind. They should accustom it to take firm hold of the past, and the future as well as the present, and thus prevent its being unduly elated or depressed, by recent events. Engagements involving much uncertainty and risk should be avoided. A variety in occupation should be secured. Holidays should be taken liberally. Those authors should be read who dwell wholesomely on the dignity and worth of human existence and who have ability in exhibiting the great in the little rather than the reverse. The religious creed should be a cheerful one, which looks forward to the best. In all periods of mental depression, the body must be remembered and attended to." The only complaint we have to make to the Register is that it assumes that the reader will have no occasion for its use after he is 72. We should have thought that the effect of the practical advice which we have quoted would be to extend the term of life much beyond the limit assigned by Mr. Hutchinson.

We should certainly recommend everyone to become possessed of this Register, which can be obtained for a trifling sum.

In Memoriam. William B. Goldsmith, M.D. New York. 1888.

These published memorials have been issued by the family of the lamented Dr. Goldsmith to comply with the natural wish of his many friends to have collected together in one small volume the various articles which appeared in the Journals after his decease. All bear witness to the intellectual ability and to the moral excellence of the late Superintendent of the Butler Hospital for the Insane, Rhode Island. Rarely has a man of 34 received and deserved the high encomiums passed upon Dr. Goldsmith. The "American Journal of Insanity" observes:—

No one will dispute our claim that Dr. Goldsmith stood *facile princeps* among the younger Superintendents of Asylums in all that pertained to the scientific side of American psychiatry. He was a constant foe to asylum routine, and while according due importance to purely administrative work, he neither suffered himself nor others to forget that before all else he was a physician.

Not medical men only paid the tribute of respect and affection to him, but his neighbour, the poet Whittier, wrote:—

A man of superior ability, wise beyond his years, his natural fitness for the great work of his life, the love and confidence which he called forth from the suffering people under his charge, the patience, self-control, and mingled firmness and sympathy which he manifested on all the trying occasions of his vocation, proved him to be unmistakably a providential man. He had that great, but strong enthusiasm of humanity which finds its happiness as well as its duty in relieving the suffering and leading home the estray. Outside his profession he was a universal favourite. All who knew him loved him. . . . He had a fine sense of humour, and a ready perception of the ludicrous, but they were never indulged at the expense of the poor and unfortunate. Nothing in him was more noticeable than his deep and tender reverence for human nature, however mentally warped or disfigured. He saw the image of God in all who were under his care. What wonder that his patients loved him with a love which at his death would not be comforted! In our sorrow for his loss may we not find consolation in the thought that in his short life he did a work the beneficial effects of which will long survive him. There was no failure in the rounded completeness of his life.

For ourselves we can only repeat the expression of admiration of his character and profound regret for his loss which we have recorded in the obituary notice published in this Journal, July, 1888.

Penological and Preventive Principles. By Wm. Tallack. Wertheimer, Lea, and Co., 1889.

The Secretary of the Howard Association, which was instituted in London 23 years ago for the promotion of the best methods of the treatment and prevention of crime, has produced a work which contains a large amount of information in regard to prison systems, supported by a large number of statistics. In the section of "Separation and Physical and Mental Diseases" it is observed: "There is one malady, that of insanity, or a tendency to it, which has often been attributed to this system, as a special danger, and wherever the method has been converted into mere isolation this has been a very real danger, as was notorious, for instance, in the experience of the New York State Prison at Auburn, in 1829, when not only insanity, but suicide, death, and utter prostration, both physical and moral, resulted. But great exaggerations soon became current as to the general tendency of cellular treatment in this direction. It was often urged, and by persons who ought to have known the facts better, that at Pentonville Prison, in London, the system was a total failure on this account. The incorrectness of these statements was authoritatively exposed by the Rev. Mr. Burt, chaplain of that establishment, in his work on the Separate System. He showed that, during the period of complete separation of the prisoners for periods of eighteen to twenty-four months, at Pentonville, from 1842 to 1848, their mental health was superior to that of a later and less stringent discipline. He observes: 'The insanity under the altered system has been *eight times greater* than during the four preceding years, when the original (cellular) system was in full operation.' But the Pentonville system was always a defective one. Its assumption of the term 'model' prison was quite unwarranted by facts. The rigour of separation was never in this prison accompanied by those necessary and merciful ameliorations which other better conducted cellular establishments in various countries have adopted. But incomplete as was the Pentonville plan, it was never so mischievous to the minds of the prisoners as has often been represented" (p. 121).

Mr. Tallack thinks that at the present day there is comparatively little danger of insanity from the separation of ordinary offenders, as the necessity for precaution in this

direction, such as books, employment, etc., is fully recognized, but he holds that the attempt to apply solitary confinement to life sentences, or long terms, is dangerous and inhuman. He states that the statistics of modern cellular prisons, in respect to insanity, do not compare unfavourably with those of association establishments; and in some cases it appears that the amount of insanity is greatest at the present time in the latter.

Under the head of "Abnormal Cases," the author refers to prisoners who are morally insane, and observes that "they seem to be 'past feeling' as to the moral sense; exhortation, persuasion, threats, kindness, civility, each and all appear to have little or no effect upon them. They are almost out of the reach of either ordinary or special influences. And hence, for the safety of the public, there seems to be only one effectual means of dealing with them, namely, to place them under very prolonged restraint, not so much with a hope of altering their condition as of simply keeping them out of the way of inflicting grave injuries upon the community. They are, in fact, an abnormal class, and must be dealt with accordingly" (p. 181).

Mr. Tallack concludes that this class should be placed under prolonged and secure restraint. Their actions should be regarded by the law as a decisive proof and test of their madness. And they should, at least equally with the "intellectually insane," be secluded in institutions adapted to their special condition. It is added that if released their subsequent supervision should be life-long. It is difficult, however, to see how this oversight could be sufficiently vigilant. In the interest of the community we consider that they ought to be detained for the term of their natural life.

To those who are interested in criminal life and the best modes of punishment and reformation of criminals, we commend this work. We regret, however, that the author has made the mistake of introducing doctrinal theology into the discussion of the subject upon which he treats. This might have been avoided, and yet an appeal been properly made to the general principles of religion.

"The Sunnyside Chronicle" and the "St. Andrew's Review."

We have before us the numbers of a publication which is issued from the Royal Lunatic Asylum, Montrose. Dr. Howden has every reason to be satisfied with the material

which has been provided by those who are inmates of or connected with the Institution. Some contributions on Witchcraft are curious as showing how the belief in witches still lingers in a land which has at all times clung so fondly to this fascinating but pernicious superstition. The most original and amusing among the contributions is "An Odd Ode."

Space will not allow of quotations. Our present object is to express our interest in this publication, evidencing, as it does, the vitality of this excellent Asylum, and the zeal with which the greatly-esteemed Medical Superintendent directs its course.

We have also to give a friendly welcome to the "St. Andrew's Review," a journal of general information, which is entirely managed by the patients of the Northampton Hospital for the Insane. We are informed by Mr. Bayley that they write the articles, set up the type, and do all the printing. We are glad to see another example of the attempts made to interest patients of the social position sent to registered hospitals, for they belong to a class much more difficult to employ than the inmates of County Asylums. Magazines of this kind often thrive so long as there are certain patients of intelligence and culture, but collapse directly they leave the Institution. Although, however, this is disappointing, sufficient good has been done—probably a patient cured by means of occupation—to repay the time, trouble, and expense which have been expended. We hope that this serial may long be conducted with spirit and ability.

On the Treatment by Suspension of Locomotor Ataxy and Some other Spinal Affections, as described by Professor Charcot. Translated from the French by A. de Watteville, M.A., M.D., B.Sc., Physician-in-charge of the Electro-therapeutical Department in St. Mary's Hospital, London. David Sholt, Oxford Street, W. 1889.

Whether this new mode of treating Locomotor Ataxy be ultimately found to be of extensive application or not, the profession is indebted to Dr. de Watteville for having translated Charcot's description of the treatment of this malady by suspension. It appears to have been hit upon by the unexpectedly good effects of Sayre's plaster-of-Paris jacket, when used in the case of a patient suffering from spinal

curvature, complicated with locomotor ataxia, by a Russian physician, Dr. Motchoukowski. M. Charcot tried the method and met with some striking results.

We refer the reader to the pamphlet itself for full information in regard to this system.

Mayne's Medical Vocabulary, being an Explanation of All Terms and Phrases used in the Various Departments of Medical Science and Practice. Revised and enlarged, by W. W. Wagstaffe, B.A., F.R.C.S. J. & A. Churchill, London. 1889.

The excellence of "Mayne's Medical Vocabulary" has been always appreciated, and we should like to have seen a short sketch of the original editor's life and work prefixed to this edition. That it should have reached the sixth, which is now edited by Mr. Wagstaffe, the late Assistant Surgeon and Lecturer on Anatomy at St. Thomas's Hospital, is sufficient proof of the utility of a small handy dictionary like the one before us. The quantities and accents of words are given. As at a recent meeting of a medical society in London we were taught to lay the accent in the word Pem'phigus on the second syllable, and had to give up the usual custom of accentuating it on the first, we are relieved to find that the most recent authority, Mr. Wagstaffe, no less than the Greek original, supports us. A word in regard to which much difference in practice obtains, namely, *Tinnitus*, and which is very generally pronounced with the quantity of the second syllable short, is in this dictionary correctly accentuated on the middle syllable. We remember two learned examiners of the College of Physicians taking different sides on this question, and, if we remember correctly, he who supported the short quantity was able to cite one of the Latin poets in his favour; but we suppose this was a poetic license, which would scarcely suffice to carry with it that of the London College. Neurasthe'nia is accentuated in accordance with the ordinary pronunciation. Not long ago a lecturer at the same College was called to account for accentuating this word on the penultimate, but although it sounds pedantic, it appears to be justified by the Greek (*ἀσθένεια*).

We miss a good many terms used in psychological medicine, but it would be unreasonable to expect to find them in a small medical vocabulary. In fact, the range of

this specialty has grown so wide that it calls for a dictionary of its own. Such a work is in course of preparation, and will be issued by the enterprising publishers of this book, Messrs. Churchill.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *French Retrospect.*

By T. W. McDowall, M.D., Morpeth.

Annales Médico-Psychologiques. 1887.

The Lunacy Law before the Senate. Abstract of the first Debate. By Dr. Baume.

An abstract of an abstract is rarely interesting, especially when it refers to a debate; but the following paragraphs from Dr. Baume's paper will give some idea of the more important points aimed at in the new Act. As in England, so in France, there does not appear to be a real necessity for lunacy legislation; but the Government has yielded to active and noisy agitation. The more closely the old law of 1838 has been examined, the more clearly its good qualities have become evident, and the difficulties of effecting a real improvement more obvious.

To prevent abuses in the employment of restraint and seclusion, the Government has deemed it necessary to ally the medical and legal authorities. This new arrangement is the most important innovation proposed by the Government.

The first article provides that public and private asylums are to be exclusively devoted to the treatment of mental diseases. Incurable cases, idiots, and epileptics may be admitted only until other provision has been made for them in colonies, refuges.

The duties of physician and director in public asylums are to be combined in one person; and a similar arrangement is to take effect in the lunatic wards of hospitals.

The Minister of the Interior appoints the governors, medical superintendents, medical assistants, and the chief secretaries of public asylums; the medical superintendents and assistants of private asylums acting as public ones. The assistant medical officers are appointed by competition; the medical superintendents are nominated from a list made out by the upper committee. The inferior officers are appointed by the prefects and others.

Articles 7 and 8 provide for the supervision of lunatics at home or in the house of a distant relative or stranger. In the latter case the residence is treated as a private asylum, and inspected accordingly. In the former, where the patient is with near relatives, and if the necessity of keeping him under control has lasted three months, the declaration, supported by a detailed medical report,

must be made to the Procurator of the Republic. He, after consultation with the medical inspector, shall decide whether the treatment shall continue as before, on condition that the family produce a fresh certificate within three months.

These arrangements, which perhaps constitute the most important proposals in the new law, have been much opposed as excessive and violating family privacy.

Article 11 is new. In each department a doctor of medicine, appointed by the Minister of the Interior from a list prepared by the Superior Lunacy Committee, shall superintend, under the authority of the Prefect, the carrying out of the present law and the regulations relative to lunatics; shall secure the protection of their persons, control residence in and discharge from asylums.

Article 13. Official visits of public and private asylums: by the prefects every six months; by the procurators every three months; and optionally by president of the tribunal, the judge, the peace, and mayor.

Articles 20 and 21 contain the great innovation proposed by Government. All lunatics are admitted only provisionally and to an observation department. They must be visited within five days by the medical inspector. Within fifteen days the Procurator must submit his report, &c., to the tribunal, which must decide as to the detention or discharge of the patient. The decision must be notified within twenty days unless more information is required.

Article 36 decrees that in all hospitals situate at the county town a department must be arranged for the temporary reception of lunatics, as well as for accused persons supposed to be insane. Detention in these observation departments must not exceed a fortnight.

Articles 38-42 provide special asylums for criminals. This separation of lunatics who have committed crimes from other criminals is regarded as a great improvement.

On Recovery from General Paralysis. Theory of Pseudo-Paralytic Insanities.

In this paper Dr. Baillarger returns to this very perplexing subject. His views are well enough known, but it is questionable if his theory is of any service in practical medicine.

The first three parts of the paper are really introductory to the fourth, which contains a repetition of Dr. Baillarger's theory as expounded in the *Annales* in 1883.

General paralysis has two principal forms.

In the first we observe, from the beginning, the essential and pathognomonic symptoms of the disease,—dementia and paralysis. This is primary paralytic dementia. This demented form, whether or not subsequently complicated by delirium, is always incurable.

The other form begins with maniacal or melancholic delirium, preceded by neither dementia nor paralysis. It is, or is not, associated with symptoms of ataxy. This is the mental (vésanique)

form, and is the one associated with the cases of recovery recorded by writers.

According to the theory proposed by Dr. Baillarger, these two forms ought to be considered as two distinct diseases.

Authors employ indiscriminately the terms general paralysis, paralytic dementia, and paralytic insanity. The two latter, he says, should be used exclusively to denote, the first, general paralysis; the other only the primary mental forms of the disease.

It is to this paralytic insanity that we must attribute the pretended recoveries from general paralysis.

If this theory raises objections, they are not those which can be advanced against the theory of the pseudo-paralytic insanities.

If we consider, for example, the commonest form of general paralysis, paralytic mania, it is clear that we need no longer trouble to differentiate a true paralytic mania and a pseudo-paralytic mania. It would, therefore, be no longer necessary to admit into our classification two diseases having the same symptoms and often the same termination, and yet of a completely different nature.

The objection as to errors in diagnosis could be no longer urged, for the symptoms of paralytic dementia and paralytic insanity are so different that they could not be confounded.

So also in the cases where one is obliged to remain in doubt for a longer or shorter time, *fearing* the existence of general paralysis without being able to declare it. In all these cases we would at once see that they were examples of paralytic insanity in the initial stage, and when recovery occurred it would not be necessary to debate the question whether it had been a genuine case of general paralysis or a pseudo general paralytic case in the initial stage.

The majority of writers consider general paralysis as quite incurable. Some even absolutely deny the possibility of recovery. This opinion appears to Dr. Baillarger to necessitate the admission:—

1st. That we have hitherto confounded, under the name general paralysis, two distinct diseases;

2nd. That there exists besides general paralysis a special kind of insanity characterized by grandiose delirium, incoherence, hesitation of speech, inequality of pupils, etc., that is to say, by all the classical symptoms hitherto assigned to the first stages of the nervous (vésanique) form of general paralysis;

3rd. That this form of insanity, separated from general paralysis, cannot on the other hand be classed along with the simple forms of insanity, and consequently must be placed apart in any classification.

The incurability of general paralysis being admitted, there cannot be any difference of opinion on these three points. On the other hand, concerning the relations of pseudo-paralytic insanity and general paralysis there exist two widely diverging opinions.

According to the former, they continue to admit a mental (vésanique) form of general paralysis characterized by grandiose

delirium, hypochondria, hesitation of speech, inequality of the pupils, etc., in fact the same symptoms as the special insanity which has been separated from general paralysis, and to which has been given, for this reason, the name of pseudo-paralysis.

But this view raises serious objections.

1st. It renders errors in diagnosis inevitable—errors which cannot be recognized until the termination of the disease.

2nd. In other cases, and this more frequently, it necessitates the suspension of the diagnosis and the continuing in doubt during the whole attack, or at least until the demonstration of symptoms of dementia and paralysis.

3rd. It also necessitates the classification, side by side and yet distinct, of two diseases having not only the same symptoms, but very often the same termination—a proceeding not at all satisfactory.

It does not appear to Dr. Baillarger that the cases of reputed recovery can be explained by errors of diagnosis.

The Lunacy Statistics of Paris (1872-85).

By Dr. Augustin Planès.

The official records up to 1871 were destroyed during the Commune, it was therefore impossible for the author to extend his researches beyond that date. He sought to discover: 1st, Whether the number of lunatics is continually on the increase, as is generally said; 2nd, how far each sex contributes to this increase; and 3rd, if there are any forms of mental derangement which are on the increase or the contrary.

From 1872 to 1885 forty-nine thousand lunatics were placed in public and private asylums of Paris. The following table shows that the total number of admissions has considerably increased, and that the increase has been practically continuous:—

	Males.	Females.	Total.
1872	1695	1389	3084
1873	1841	1408	3249
1874	1743	1510	3253
1875	1770	1400	3170
1876	1782	1448	3230
1877	1776	1565	3341
1878	1829	1507	3336
1879	1902	1489	3391
1880	1932	1552	3484
1881	2097	1641	3738
1882	2093	1623	3716
1883	2208	1755	3963
1884	2313	1813	4126
1885	2289	1897	4186
			49267

The population of Paris was:—

	Males.	Females.
1872	927,224	924,568
1876	980,838	1,007,968
1881	1,113,328	1,126,602
1886	1,103,014	1,157,931

Accordingly there was one insane person admitted in each of the following numbers:—

	Males.	Females.
1872	547	665
1876	550	696
1881	530	686
1886	481	610

These figures show that if we may take admissions as equivalent to occurring insanity, it is markedly on the increase. This, however, is very unsafe. No distinction is made between first admissions and relapsed cases, and no intimation is given as to the proportion of transfers. Were these sources of fallacy allowed for, the result might be entirely different. The increase was chiefly due to alcoholic, demented, and senile cases.

Of the 49,267 cases, 27,270 were men and 21,997 women. Insanity is therefore more common in men than women, in the proportion of 129 to 100.

The second portion of the paper is limited to an examination of the patients who passed through the "special infirmary," where they were examined and certified by Lasègue, Legrand du Saulle, and Paul Garnier.

The following table shows the number of cases occurring in each month:—

	Men.	Women.	Total.
January	1380	1105	2485
February	1295	1075	2370
March	1455	1119	2574
April	1532	1202	2734
May	1638	1250	2888
June	1721	1279	3000
July	1685	1263	2948
August	1648	1173	2821
September	1386	1035	2421
October	1489	1188	2677
November	1347	1112	2459
December	1331	1060	2391

Arranged quarterly, the figures are:—

	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.
Men ...	4130	4891	4719	4167
Women ...	3299	3731	3471	3360

Setting aside the view that the temperature of the seasons influences the occurrence of insanity, Dr. Planès concludes that the quarters of the year should be arranged as follows: The

second (April, May, June), the third (July, August, September), the first and the fourth. It is during the second quarter that the maximum number of cases of insanity and suicide occur.

The relative frequency of the forms of Mental Derangement.—The following table shows this clearly enough. The first column shows the absolute number of cases, the second, the percentages :—

Men.		
Alcoholism	5063	28
Maniacal excitement... ...	2679	15
Senile conditions	2491	14
General paralysis	2108	12
Mental debility (adults) ...	1488	8
Epilepsy	1250	7
Melancholia	1099	6
Delusions of persecution ...	1006	6
Children	760	4
		100
Women.		
Maniacal excitement... ...	2986	22
Senile conditions	2658	19
Melancholia	2038	15
Delusions of persecution ...	1607	12
Mental debility (adults) ...	1012	7
Hysteria	825	6
Alcoholism	818	6
General paralysis	742	5
Children	554	4
Epilepsy	532	4
		100

Alcoholism.—Under this head are included all the victims of alcohol in every degree of intoxication, from chronic alcoholism to delirium tremens :—

	Men.	Women.	Total.
1872	261	41	302
1873	333	44	377
1874	298	47	345
1875	311	58	369
1876	335	53	388
1877	302	60	362
1878	319	59	378
1879	356	71	427
1880	355	47	402
1881	401	64	465
1882	442	55	497
1883	482	66	548
1884	444	77	521
1885	424	76	500

The number of alcoholic cases is gradually increasing. From 1872-1880 inclusive, the annual mean was 378, but during the last five years it has risen to 506. Omitting several tables we come to

General Paralysis.—The following are the numbers for each year :—

	Men.	Women.		Men.	Women.
1872	138	45	1879	137	50
1873	174	36	1880	136	52
1874	137	37	1881	139	50
1875	155	39	1882	150	58
1876	147	46	1883	191	79
1877	135	42	1884	182	72
1878	145	57	1885	172	79
				2,108	742

These figures give a proportion of three men to one woman. Dr. Planès explains this remarkably high rate for the women by stating that these figures refer only to the lower social orders, patients of the "special infirmary," and it is notorious that general paralysis is much more frequent among lower class women than in the upper. Contrary to what might have been expected, the rate of increase is not by any means very marked among the males, but is decidedly more so for the other sex.

Space will not permit us to do more than reproduce the following tables. Any intelligent reader can draw the obvious conclusions :

Melancholia.

	Men.	Women.		Men.	Women.
1872	67	128	1879	69	143
1873	70	136	1880	72	139
1874	70	146	1881	96	184
1875	70	138	1882	106	159
1876	59	123	1883	107	159
1877	59	119	1884	120	195
1878	58	114	1885	76	155

Delusions of Persecution.

1872	79	93	1879	60	115
1873	82	15	1880	73	102
1874	56	113	1881	65	119
1875	65	76	1882	89	104
1876	72	131	1883	84	138
1877	58	124	1884	79	137
1878	67	86	1885	77	154
				1006	1604

(To be continued.)

2. *Dutch Retrospect.*

By J. Pieterson, M.D.

(Concluded from January, 1889, p. 614.)

An experiment of great importance has lately been demonstrated by Unverricht: when at the commencement of a seizure one, or, perhaps better, more, motor centres are quickly extirpated the muscles of these areas thus innervated take no part in the universal contraction-phenomenon. Munk succeeded by the simple extirpation of a single centre from the cortex in eliminating from the general convulsion the contractions corresponding to that centre; Rosenbach succeeded in this only when he had destroyed all the motor centres of one hemisphere.

Contrary to results thus obtained, he instances the experiments of Albertoni and of Pitres and Franck. The former found that after extirpation of the motor centres of one hemisphere he obtained universal muscular contractions by irritation of the other; the two latter also found that the contractions caused by irritation of the cortex were uninfluenced by the extirpation of one or more motor centres. On the other hand, Bubnoff and Heidenhain consider that the cortex is the true seat of origin of these contractions, and Luciani has contradicted Albertoni's experimental results.

Of importance, too, are the later investigations of Rosenbach as to the action of bromides on the convulsive seizure. He found that after administering a certain dose of bromide it was impossible by irritating the cortex with an induction current to awaken these convulsive attacks. The influence of bromides on the subjacent white matter was minimal; by irritation thereof contractions could again be induced without the occurrence of any universal convulsion on strengthening the irritation, and, moreover, the seizures ceased directly the current was interrupted. It is without doubt an important fact that after the exhibition of bromides, the most active anti-epileptic we know of, the contractions caused by irritation of the brain-cortex should no longer evince themselves. We have no doubt that if these experiments of Rosenbach are repeated they will be verified. Unverricht claims to have induced in the subjects of his experiments by continued cortical irritation, or where the cortex showed a marked susceptibility thereto, a condition conformant with the status epilepticus observed in man. Rosenbach repeated the old experiments of Nothnagel, and irritated the floor of the fourth ventricle before and after section of the medulla oblongata. He found universal contractions to ensue, which, however, in point of time coincided directly with the duration of the irritation, and did not, as in irritation of the cortex, commence some time after the onset and continue

some time subsequent to the cessation of the irritation. The assumption is not too hazardous that this difference in result between irritation of the capsular and subjacent white portions of the cerebrum must be explained by the fact that the ganglion cells exercise a specific function whereby an irritation must first accumulate before its action proceeds. In the physiology of the reflex centres analogous phenomena are to be found in great number. Golz, who in Pflüger's "Archiv," Bd. xxxvi., p. 479, disputes the cortical origin of epilepsy, is thus disposed of :— "Golz here communicates the phenomena he observed in dogs from whom on both sides the whole so-called motor bulb had been removed. These animals could for months remain in good condition, and would then die with symptoms of universal epileptic convulsions. From this he draws the deduction that there is no foundation for considering the so-called motor centres in the cortex the starting point of epileptic contractions. Against this opinion forwarded by Golz may be placed what in general may be summarized against his methods of argument, viz., that the direct results of his experiments are more exact than his inferences therefrom. When these animals had lived for months in good health there must undoubtedly have ensued an adoption of function by the still remaining intact cortex, and a certain amount of readiness of action must again have come to the muscles. Then there is also afforded the possibility of the appearance of epileptic contractions especially because there existed at the same time a palpable brain lesion. It would prove much more if Golz could bring forward a case in which universal epileptic contractions were to appear *during the period of existence of degenerative symptoms*, and thus shortly after the operation and when the residual cortex had not yet assumed the degenerated functions." The above is a short *résumé* of the most important and best confirmed facts on which the theory of the cortical origin of epilepsy is built. It will be interesting now to examine in how far pathological anatomy and clinical observation tend to support or subvert this deduction.

"In post-mortem examination in cases of epilepsy there are in some cases to be found lesions most varying in their nature, in others no noticeable deviation from the normal. This latter is probably the rule in all recent epileptic cases, and from this must directly be inferred that the changes found in cases of longer standing must be regarded rather as the result than as the cause of this malady. In the first place I wish to establish the fact that even in the long-standing cases of epilepsy, where the affection has progressed even to the furthermost imaginable stage of dementia with obliteration of all the higher intellectual faculties, where the speech even is lost and life is reduced to a condition of pure vegetative existence, that in these cases even any trace of anatomical digression from the normal may be absent. Such cases

are, however, greatly in the minority, and I have met with only two. One for years confined in this asylum (Meerenberg, Bloemendaal) had frequent epileptic attacks up till the day of his death with secondary dementia. At the post-mortem examination neither macro- nor microscopic change could be demonstrated. I made numerous sections of the cortex in every conceivable direction, staining and colouring them after every known method, but it was not granted me to discover any pathological divergence. The other was admitted here with the diagnosis idiocy, and to this, in fact, his symptoms directly pointed. He was a young man of three-and-twenty, who could neither stand nor sit upright, who never spoke, and who evinced no sign of imaginative faculty or intellect, whose limbs were drawn up and contracted, and who was continually confined to bed, and fed artificially. His history showed that until his ninth year he had exhibited no physical or mental abnormality, but that subsequently epileptic attacks had made their appearance. His affection undoubtedly makes one suspect, and points to 'idiotia atrophica,' and causes one to regard the epileptic seizures as a consequent symptom. After treatment lasting about six months, patient died. At the post-mortem the brain, though slightly œdematous, was found to be otherwise altogether normal; neither coarse nor microscopic change could be positively demonstrated; the sections through the cortex were treated and examined in every possible way, but neither in the ganglion cells nor in the fine network of nerve-fibres in the cortex could any change be discovered. The most natural conception of this case is that in a child in good health up to the age of nine epilepsy made its appearance, and that this led to an unusually severe degree of dementia, and that this was not an instance of 'idiotia atrophica.' It occurs to me that many cases which are described in works as of long-standing idiocy, and where after post-mortem no pathological change can be found, that these are cases such as the above-mentioned. For true cases of atrophic idiocy one usually finds a pathological substratum or a congenital deficiency of brain-substance; for an epileptic dement this need not by any means be the case. During life both affections can in every way be characterised by the same symptoms.

"Bourneville claims to have found a pathological distinction between epileptic and other forms of dementia, especially the paralytic. He maintains that epileptic dementia demonstrates its presence in the lower layers of the cortex, and that it causes changes there, while paralytic dementia produces change in the upper layers, and that then it is as a rule accompanied by a chronic meningitis. Both the above-mentioned cases, however, controvert this statement. Equally in the lower as in the higher cortical layers have I failed to demonstrate any pathological change notwithstanding the extreme degree of dementia. There remains, therefore, no other conclusion for us to draw but this, that epilepsy

can proceed to a strongly-pronounced degree of dementia without it being necessary to find a consequent anatomical lesion. These cases of epileptic dementia without pathological divergence are, however, rare."

Another class of epileptics to consider are the epileptic idiots. It is a fact universally recognized that idiots are considerably prone to the development of epilepsy, inasmuch as epilepsy so frequently appears in conjunction with idiocy, and that as the latter is a primary affection one must naturally suppose some bond to exist between these two maladies. In a large proportion of these cases anatomical changes extremely varied in their nature are to be found in the cerebral tissues. Epilepsy must not, therefore, be made answerable for these lesions, but we must suppose that in consequence of such changes there have ensued both idiocy and epilepsy. These lesions concern in the first place the cortex and the white matter of the cerebral hemispheres, but in addition there are also to be found the secondary lesions which appear in the cerebral base and in the medulla oblongata. But it is just by reason of this secondary change that epileptic idiots give us so little that is decisive to draw conclusions from as to the seat of lesion of epilepsy; the secondary as well as the primary pathological change might be made responsible for it, and we might thus pronounce a medullary lesion, as Nothnagel formerly did, to be the primary seat of an epileptic attack. We are hence led to the conviction that the lesions which are found in cases of idiocy may rank as causes of the simultaneously existing epilepsy, which, to judge by the phenomena it presents, runs a normal retrograde course. This fact is important, not because it teaches us aught as to the seat of lesion of epilepsy, but because it refutes the opinion that an epilepsy which finds its origin in material brain-change must *per se* run an *ab*normal retrograde course. In reference to this, hemiatrophia cerebri deserves some consideration. Here, while a wholly atrophied cerebral hemisphere with its fellow in a perfectly normal state are to be found, an epilepsy will co-exist which shows no digression from the ordinary form. He instances two cases undergoing treatment in the asylum in whom this diagnosis of cerebral hemiatrophy has been made who are subject to a concurrent epilepsy. In one of these the peculiar character-degeneration, which Samt has described so aptly, and which differs so materially from the character-deformity observed in hysteria, has evinced itself. Here, then, we have a pure epilepsy existing coincidently with an organic brain-lesion. He cites a third case in which an extensive fracture of the skull, the depressed bone having at the time of accident been removed from the left frontal region, was followed some years after by epilepsy and consequent dementia. The epilepsy differs in no way from the ordinary form; the attacks are not frequent, are of the *grand mal* type, and of long duration. No motor or sensory degenerative symptoms are evident.

By the side of these instances of organic brain lesion in which a normally retrogressive epilepsy existed there are arrayed the numerous cases of organic cerebral affection in which there is to be found not a true epilepsy, but an epileptoid condition. Here we do not find a single convulsive attack, but a condition in which one or more of the prominent signs are in abeyance—either that the unconsciousness is only more or less complete, and a recollection less or more pronounced of the attack exists, or that the muscular contractions have an abnormal onset, confining themselves to one or more of the extremities, exhibiting only a clonic or a tonic character, displaying first a clonic then a tonic contraction, etc. He adduces two cases out of a large number for purposes of illustration—one of a woman who, during the latter years of her life, had been subject to advanced dementia, and who had had frequent attacks of an epileptoid nature with partial unconsciousness. These attacks would follow one another in rapid succession, giving rise to a condition of stupor; further than this there were no other recognizable degenerative symptoms. Post-mortem revealed bilateral accumulation, especially in the frontal lobes, of numerous small "granulation tumours" (? syphilitic) varying in size, the largest being about $\frac{1}{16}$ inch in diameter, and lying especially around the perpendicularly-running arterioles in the cortex. The other case, an old right hemiplegic with aphasia and complete infranuclear facial paralysis. The epileptoid condition is here marked by attacks of very slight nature, their duration being only a few seconds, with at times partial, at others total, loss of consciousness. Instances such as these may be multiplied indefinitely. A passing reference is made to the epileptic condition which so frequently appears in paralytic dementia. The presence of these epileptoid attacks is an important diagnostic symptom in organic brain-change, without its bearing any direct evidence as to the localization of such lesions.

"A further change which is often found associated with epilepsy (by some writers regarded, indeed, as constant) is sclerosis of the pes hippocampi (cornu ammonis). This may be uni- or bilateral. Dr. P. van Brero found four instances of sclerosed cornu ammonis in fifteen cases of epilepsy in which post-mortem examination was made in 1886 here." [This sclerosis of the pes hippocampi can be so extreme that van Brero came across a case in which even the fimbria and corpus mamillare were diminished in size. One can easily surmise that here a secondary degeneration had taken place along the tracts described by von Gudden.] "Other and extended statistics demonstrate the more frequent occurrence of this change in chronic cases of epilepsy. In recent cases not yet combined with psychical change there exist no data, and so long as it is not with certainty confirmed that the affection of the cornu ammonis precedes the advent of epilepsy, it is not justifiable to regard this sclerosis as a causative influence. Over

and above this too little importance has been attached to another circumstance. Sclerosis of the pes hippocampi has been especially demonstrated in chronic cases in which a remarkable degree of dementia has been existent, and in which this sclerosis may have been but the part of a sclerosis affecting the greater part of the cerebrum. When in like cases close notice of the condition of the superjacent cortex is not taken, these observations and deductions will have but little value. The conclusion Sommer draws that the hippocampal affection can rank as the cause of epilepsy must, therefore, certainly be regarded as unproved. The theories which have been proposed in connection with epilepsy as to the functions of the cornua ammonis overstep all experimental principle. The only trustworthy data which can be adduced in support of this are to be found in comparative anatomy. From this we gather that in primates and other anosmatic mammals (the dolphin, etc.), the whole of the pes hippocampi is very ill-developed, while the osmatic mammals exhibit an extraordinary development of this portion of the brain. There is a good deal of likelihood, therefore, that the development of the cornua ammonis stands in some relation to the sense of smell. The frequent appearance of hippocampal sclerosis in chronic cases of epilepsy renders it desirable that collections of data as to recent cases be made. It is most likely that epilepsy frequently is the cause of this change in the pes hippocampi. Lastly, sclerosis of one or both cornua appears in other cases than epileptics. In other forms of insanity I have been able, though rarely, to demonstrate its presence. Whether it can be found in subjects afflicted with non-mental disease I cannot decide."

In the above summary the changes which may occur in the cortex in so far as they may in a greater or less degree rank as likely causes of epilepsy have been noted. [It will be observed that the author makes no mention of a series of phenomena to which Gowers ("Diseases of the Nervous System," Vol. ii., p. 698) has drawn special attention—the fact that the different auræ give us information as to the functional region of the cortex in which the process of the fit begins. The rarity, too, of olfactory auræ might have been cited to controvert the theory of the hippocampal origin of this disease.]

Epilepsy, following the universal cycle of nature, causes in its turn also changes in the cortex cerebri. These changes are usually diffuse in their nature, but may also be local, *e.g.*, the above-mentioned cornual sclerosis. To decide whether a lesion is to rank as consequence or cause in cases of epilepsy we must take note of the time of its commencement. The under-mentioned anatomical changes occur only after the prolonged existence of epilepsy and must therefore rank as its effect.

The pathological anatomy of chronic epilepsy agrees almost wholly with that of chronic dementia, and in all likelihood is but

the expression of that simultaneously existing dementia. We find in the first instance chronic meningitis, which is distinguished from the meningitis of general paralysis in that the thickened meninges are not adherent to the cortex, but can be separated with ease, by a less rich arterial anastomosis and with a less free development of the structural elements in the walls of the vessels which are also less dilated—it is the ordinary meningitis of chronic dementia. This meningitis may have occasioned secondarily an atrophy of the different cerebral convolutions, or this convolutional atrophy may exist independent of a chronic meningitis. Cases of atrophied cerebral convolutions with a normal condition of the meninges are relatively not so rare. This atrophy is a simple diminution in thickness of the grey matter, no apparent external abnormality being observed, and a narrow cortex being only demonstrated on section, or the whole convolution, including the white substance, may be atrophied and its condition then recognized as such externally. In all probability these are two distinct developmental stages of the same pathological process, and in the latter the change has passed over to the white matter in the form of a secondary degeneration. Coarsely we find, as a rule, an increase in the structural tissue, both in the white as well as in the grey cerebral matter. The vascular system is most frequently altered pathologically, but sometimes not at all, and, as a rule, the number of ganglion-cells in the cortex is largely diminished. As to the nerve-fibres in chronic epileptic dementia, a diminution of these is possible, and even most probable. It is, however, difficult to determine whether in an atrophied convolution there is to be found a proportionate or disproportionate decrease in the nerve fibres. It is usually easy after examination of a satisfactory number of sections to make a differential pathological distinction between ordinary and paralytic dementia. In the latter, one usually finds many spindle cells, the blood-vessels are mostly markedly changed, the walls of the vessels are dilated with free development of their structural constituents, the number of blood-vessels also is increased, while, as has lately been demonstrated by Tuczek with certainty, the number of nerve fibres is greatly reduced. All these changes are either not to be found at all, or at most but in a small degree in epileptic dementia.

When epilepsy has persisted for so long a time that distinct anatomical change has supervened in the cortex, and that there thus exists a more or less considerable degree of dementia, we, as a rule, take it for granted that there is a corresponding diminution in the number and intensity of the epileptic seizures compared with the degree there existed at the time of onset of the malady, or the length of time during which it had prevailed. It is a fact for a long time well recognized by practical psychologists that with the advent of dementia the number of epileptic seizures declines. This must be regarded as pathological evidence

strengthening the already experimentally established principle that the epileptic attack, especially as regards the muscular contraction stage, is dependent on the integrity of the cortex. As soon as diffuse anatomical change appears in the cortex, then the epileptic accessions diminish in frequency and intensity. As has already been mentioned above, Unverricht found that the contractions were absent after cortex irritation when the motor centres were extirpated, and the fact that the seizure is less severe when there is an established cortical lesion is a pathological point wholly in agreement with this experimental investigation.

"When in a patient subject to epilepsy the seizures have remained numerous up to the time of decease, we have grounds for concluding that few anatomical changes will be found in the cortex cerebri, while over against this in decidedly distinct cases of dementia where the attacks have diminished during the later years in number and severity there exists great probability that at a post-mortem examination some anatomical digression will be discovered. I regard this as an important argument in favour of the cortical origin of epilepsy. . . . On the ground, then, of experimental investigation, and also in part by reason of pathological evidence, it occurs to me that the statement of Nothnagel's according to which epilepsy is made to originate by reason of a medullary lesion cannot at present any longer be defended. With greater justification can we accept the proposition that epilepsy depends on an affection of the grey superficies of the cerebrum, and while fully cognizant of its speculative nature, we introduce into our declaration an unknown quantity, designating the change of the ganglion cells in the cortex (a change with which we are not yet acquainted, but of which the symptoms are the epileptic seizure and the epileptic mental disturbance) *the epileptic lesion.* The epileptic lesion of the cortex can exist without our being able to find for it any anatomical evidence. Such are the cases of ordinary uncomplicated epilepsy which is thus a purely functional affection. For this epileptic lesion of the cortex, however, an anatomical causation can also exist, as we find in many cases of idiocy, in cerebral hemiatrophy, and in some instances of definite localized pathological digressions of the cerebrum. These localized lesions, however, do not usually give distinct epileptic changes in the residual intact cortex, but only a condition which more or less approaches thereto. These are the so-called epileptiform states which are so richly represented in organic brain change. Strictly regarded, it is thus not proper to speak of cortical forms of epilepsy, and by such to indicate the conditions where, owing to organic brain perversion, anomalous forms of epilepsy exist."

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3. *American Retrospect.*

By Fletcher Beach, M.B., M.R.C.P.

"American Journal of Insanity," July, 1888.
"Alienist and Neurologist," October, 1888.
"Medico-Legal Journal," June, 1888.
"The Journal of Nervous and Mental Disease," Nov., 1888.

The editor of the "American Journal of Insanity," Dr. Blumer, is always glad to receive assistance from his English *confrères*, and in the Journal for July are two papers—one by Dr. Campbell, "On Three Cases of Recovery after a Lengthened Duration of Insanity, with Remarks;" the other by the writer of this retrospect, "On Some of the Uncommon Causes of Imbecility." The first of Dr. Campbell's cases was one of periodic excitement, occurring always at a menstrual period, though not at every period, and is of great interest. For a period of nine years the patient had frequent and severe attacks of maniacal excitement. She was treated with large doses of bromide of potassium, and for seventeen years required asylum treatment, yet she recovered completely. The chief features in the second case were the disappearance of fixed delusions which had been held for about fifteen years, the improvement being coincident with or closely following severe bodily disease. The patient had been an inmate of the asylum for nearly nineteen years. The third case was under treatment for fourteen years, and is noteworthy on account of the disappearance of both hallucinations and delusions. Dr. Campbell is of opinion that chronic patients should be frequently shifted from ward to ward, their occupation changed, and that they should be subjected to new influences. Everyone will agree with him that "if it were possible to keep the mind vigorous and active more cases of lengthened insanity would recover."

Dr. Fletcher Beach relates cases of imbecility, in which the uncommon exciting causes were syphilis, consanguinity, chronic neuralgia, excitability, or chronic deaf-dumbness, and mentions that the first cause will only account for $1\frac{1}{2}$ or 2, the second for 2 or 3 per cent., chronic neuralgia and excitability for 2·1 per cent., and deaf-dumbness for 0·30 per cent. of those found in institutions for the education and training of imbeciles.

Paranoia in Relation to Hallucinations of Hearing with Two Cases of Medico-Legal Interest.

Dr. Fisher adopts the term "paranoia" in preference to "monomania" as a good provisional term for systematized insanities, in consequence of its steady adoption by German, French, Italian, and English writers. As far as English writers are concerned we must demur to this statement. An analysis of forty-seven cases

of paranoia which had occurred at the Boston Lunatic Hospital is given, showing that hallucinations existed in every case and hallucinations of hearing in every case but two. Dr. Fisher thinks that this constant association of hallucination and delusion with paranoia is more than a mere coincidence, and that they are essential factors in this form of insanity. A large portion of the acts of violence and homicide are committed by patients suffering from paranoia, and hence that disease is of importance from a medico-legal point of view. The patient is looked upon by the community as not insane enough to be shut up, but sane enough to be punished for his crimes. Two cases are related, and exception is taken to paranoiacs being allowed by the public and high judicial authority to roam the country unrestrained, and when an act of violence occurs they are either unjustly sentenced to death or sent to prison for life. A paranoiac should be sent to the insane hospital for life before the act of violence occurs.

Traumatic Insanities and Traumatic Recoveries.

This is a paper read by Dr. Talcott before the annual meeting of Medical Superintendents of American Institutions for the Insane. Two cases of mental disease are reported, produced by direct injury to the brain, and two cases whose recovery dates from an accidental but severe blow upon the head. The first was a case of aphemia, resulting from a blow upon the head, with occasional attacks of maniacal excitement. Memory was absent for six weeks after the accident, but after that date he could remember distinctly all the previous experiences of his life as well as new experiences, but could not recall any incident occurring during that time. Although speech and memory were gone and hearing impaired, yet the ability to read anything written on paper and to write intelligent replies to questions remained. He made a good recovery.

The second case was that of a female who was struck on the head by a brick, causing a fracture through the longitudinal sinus, depressing the bone where the blow was received, and extending the fracture forward to the frontal bone and backwards to the sagittal suture. A trephine was used just anterior to the fracture, and a large fragment of bone was removed with the forceps. The patient made a good recovery, but eighteen years afterwards she suddenly became maniacal without apparent cause. Under the idea that this was due to depressed bone the head was again trephined, and a depressed portion of skull, one inch wide by about two inches in length, was removed. On admission into the asylum, she was noisy, incoherent, and silly, but gradually became depressed, anxious, and apprehensive. She made a slow and steady progress towards recovery.

The next case was one that had suffered seven attacks of insanity in nine years. His previous attacks had lasted from three to eighteen months each, and he was entering upon his seventh

attack, when, while trying to swing upon a gas fixture and turn a somersault, the gas fixture broke and he fell, striking his head and shoulders upon a tile floor. He became unconscious, and symptoms of concussion of the brain occurred; three days after the injury he talked and acted sensibly, and, when seen three and a half years afterwards, he had not only experienced no return of the insanity, but was an active man of business.

The last case, while suffering from delusional insanity, was struck on the head by a fellow-patient with an iron chamber. Next morning he was entirely free from delusions, and about two months afterwards went home in good mental and physical condition. Six years afterwards he was still well.

The leading symptoms noticed by Dr. Talcott in traumatic insanity were "restlessness, incoherence, vivid hallucinations, mistaken identities, muscular weakness, heat in the head, and at times a besotted, half-drunken, dazed expression of countenance." The conclusion is come to that many insanities owe their inception to a blow on the head, inflicted during the growing and tender or later periods of life, and the practical lesson drawn from this conclusion is that injuries to the brain from the unskilled use of the forceps during delivery (the skilled use is preferable to tedious labour), or by blows of the hand or other weapons by nurses, parents, teachers, and guardians of the law, or accidents through the weakness and carelessness of old age should be carefully avoided and guarded against.

Proceedings of the Association of Medical Superintendents.

Dr. John B. Chapin was chosen President, and gave an address, showing that since its origin, forty-six years ago, wide-reaching results had been obtained. When first created, the number of the insane in the United States did not exceed sixteen thousand, but at the present time there are a hundred thousand, of whom fifty thousand are cared for in asylums and hospitals for the insane.

A discussion took place on Dr. Talcott's paper, and exception was taken to the term "traumatic insanity," on account of its being so general in its application as to include cases of shock; cases in which the symptoms are not so violent at first, but systematized delusions slowly develop; cases where maniacal symptoms or delusions of suspicion with maniacal outbreak develop after sunstroke; and cases in which damage is done to the brain by depression of the skull from some form of violence.

Discussion followed on Dr. Fisher's paper on "Paranoia as Related to Hallucinations," and the term as a substitute for monomania was objected to by some members and approved by others; on "The Proper Size for State Institutions for the Insane," by Dr. Dewey, presenting remarkable deviations of opinion; on "Medico-Legal Cases," by Drs. Andrews, Channing, and Godding,

from which it appears that "experts on insanity in some States in America are not held in the highest regard by judges."

An interesting discussion took place on a report brought up by a committee appointed by the Association, to whom was assigned the duty of reviewing the "official utterances" known as its "propositions," and to ascertain what progress had been made since its organization. The subjects indicated by the propositions were public provision, hospital construction, hospital organization, management and treatment and legal relations of the insane, including inebriates. The following resolutions were adopted:— (1) That it is the judgment of the Association that no present necessity for reaffirming the propositions exists; (2) That we deem it inexpedient to adopt any new propositions at this time; (3) That the thanks of the Association be tendered to Dr. Everts for his very able and exhaustive report upon the propositions, and that he be requested to prepare for the next annual meeting a paper upon this subject, giving the Association the results of his best thought on the organization and arrangements of institutions for the insane.

A Case of General Paresis.

This is reported in the "Alienist and Neurologist" by Dr. Hughes. The features of the case which claimed attention were the suddenness of its access and rapidity of its course, the predisposing cause, the predetermining cause, the exciting or precipitating cause, and the occurrence of a brief and marked lucid interval, during which the sacrament was given and his last will and testament signed, the patient passing into a state of semi-coma, out of which he came comparatively clear-headed the next morning, and died the following morning. The patient was 40 years of age at his death, an ambitious head-worker, who had for some years taken an insufficient quantity of sleep, and in whom there was a history of remote syphilitic infection. The case differed from others which had come under Dr. Hughes' notice in having apparently been "*precipitated without any appreciable precursory or incubative stage*, or apoplectic or epileptiform seizures, which usher in cases without any precursory premonitions, *and by the sudden cessation of the habitual use of morphia, to which the patient had been addicted.*" The italics are the author's. The patient took three-fourths of a grain of morphine twice a day for chronic rheumatism, and seemed all right till he suddenly stopped taking it, when psychical disorder appeared in the most exaggerated form of exalted delusion. There was hereditary tendency to insanity in the case.

The Mental Characteristics of the Sexes.

Dr. Searcey believes that by studying "the evolutionary history of reproduction we will find the fundamental causes at work that produce sex differences." He refers to the different modes of

reproduction, viz., segmentation, germination, and by minute cells. The protoplasmic nucleus repeats the *modes of action* of its ancestry. Parthenogenetic animals gestate *singly* their own genetic cells. A higher step in animal evolution was the faculty assumed by certain individuals of *not gestating* their own genetic cells, but turning them over to others to gestate for them in combination with their own cells. "The offspring of such animals arise from combined cells. In this way were evolved the sexes." The male, being at greater liberty than the female, and so meeting a more varied environment, gains new modifications faster than she does. The male all through the animal kingdom is the more varied member. The female is the more conservative of the two, a more true representative of original race characteristics; the male is a representative of the recent variations of the race. Cerebral development and cerebral functions are the speciality of the human species. In this department also the male leads, the woman follows; the male is variable and progressive, the female typical and conservative. Women are more influenced by public opinion, and hence are more moral, more religious than men. "When the race is advancing, you will see exhibited in the women firmness and constancy of conduct. In the men you will see the same traits, with additions of excellent variability—they are progressive."

Symptomatological Study on Somnambulism.

This paper, by Dr. Ernest Chambard, originally appeared in the "Progrès Médical," and was translated for the "Alienist and Neurologist" by Dr. E. M. Nelson. A full account of it would be too long, but the salient points are that "somnambulism is a modification, systematic, and in various degrees, of all the functions which constitute the life of relation; it forms a part of a group of analogous states, some physiological, as the intermediate state between sleeping and waking; others pathological, as the lucid lethargy, the general and systematic psycho-sensory delirium." All the degrees of somnambulistic awaking are comprised between the two extreme states of lethargy and wakefulness. They form a series of successive awakenings, and the following is the mode of succession:—

(*a*) Somnambulistic lethargy. Sleep of all the functions of relation.

(*b*) Automatic series. Successive awakening of the functions of relation.

1. Motor automatism. Neuro-muscular hyper-excitability.
2. Passive somnambulistic automatism.
3. Active somnambulistic automatism. Automatic dreams.
4. Active somnambulistic automatism. Automatic or subconscious life.

(*c*) State of awakening. Amnesia.

These several states are then described and illustrated.

On Granulations of the Ependyma.

This is a paper by Dr. Baroncini, physician of the Asylum for the Insane, Imola, Italy, and has been translated by Dr. Joseph Workman, of Toronto. With regard to the ependyma, Virchow has demonstrated that neither the arachnoid nor the pia mater is prolonged into the surface of the ventricles; that on this surface there is not any serous covering; that there is an epithelial stratum which lines both the encephalic cavities and the central canal of the medulla; and that immediately beneath it there is a slender connective tissue identical with that which involves and unites the nervous elements, and which he calls neuroglia. He therefore concludes that there does not exist a true and proper membrane, but merely an epithelial veil, and to this stratum the name *ependyma* remains applied.

With reference to its anatomical characters, Schopfhagen says: "The ependyma is composed of two layers—one superficial and the other deep. The former is formed of cylindrical epithelia, from which there depart delicate and very slender prolongations, which dip down into the layer beneath; the latter is constituted of fibrillar tissue, among which numerous round and oval cells are found."

Rokitansky, in his "Treatise on Pathological Anatomy," considers enlargements of the ependyma as an exit of chronic hydrocephalus, and describes five different forms of it, viz., 1st, Granulations as fine as sprinkled sand; 2nd, Larger granulations which in time become pedunculate nodules; 3rd, Membranous adherent patches, of round form, and of tendinous aspect; 4th, Concatenate patches, with areolæ, forming a network that adheres to the ventricular surface; 5th, Very large pseudo-membrane, which is ultimately fused with the ependyma. The first sort only is that which is here referred to. According to Bayle, it is chiefly met with in cases of chronic meningitis; most pathologists, however, hold that the granulations are a special character of progressive paralysis, but that they may exist in other maladies also. All agree that they represent an anatomical character of the last stages of paralysis of long duration, and depend upon a phlogistic process of the ependyma. On going through the records of his autopsies, 650 in number, Dr. Baroncini found that 62 were paralytics; 41 were males, and 21 were females. The true granulations, called by the French *chagrinèe*, were only observed in 32 cases. As to their seat, the granulations were found twice in the fourth ventricle only; in all the other cases they were seen clearly in all the ventricles. The forms of mental disease in which the granulations were found were: Alcoholic phrenosis, one man; consecutive dementia, one man, three women; paralytic phrenosis, nineteen men, eight women. Dr. Baroncini's experience led him to differ from the opinion generally held that granulous

ependymitis is an essential character of psychoses of long duration. He noticed an important fact that requires to be confirmed by further observations, viz., that granulous ependymitis is almost always accompanied by opacities and thickenings of the cerebral membranes, and by sub-arachnoid and ventricular œdema.

The remainder of the "Alienist" is chiefly occupied by an account of the annual meeting of the Association of Medical Superintendents of the Insane, which has been already noticed.

The "Medico-Legal Journal" contains a paper on "Suicide and Legislation," by Clark Bell, Esq., President of the Medico-Legal Society of New York. He is of opinion that, whatever may have been thought of suicide in ancient times, it may now be safely stated that suicide in all civilized countries is regarded as a crime, "because it is an offence against the laws regulating and ordering the general welfare of society." He inquires, 1st, Is suicide, as a social evil, on the increase?; and, 2ndly, What best can be done by society to diminish its increase, either by legislation or otherwise? It appears from statistics that in France, since the year 1831, there has been a rapid and steady increase in the number of suicides, and experience proves that exceptional years and causes produce exceptional results. As a result of the examination of some tables compiled from the United States census of 1870, and of a table in the "Medico-Chirurgical Review," Dr. O'Dea concludes, 1st, that suicides increase in number until extreme old age; 2ndly, that the increase is in the direct ratio to population until the age of thirty, after which it continues in inverse ratio to population until the allotted time of life; 3rdly, that the number of suicides is very small, both relatively and absolutely, to population previous to the age of fifteen. The influence of sex, insanity, education, nation and race, domestic trouble and drunkenness on suicide is considered, and the author then inquires what can best be done by society to diminish the increase of suicide by legislation or otherwise. The most striking proposition of recent times is that submitted to the International Medico-Legal Congress of Paris, by Dr. Jeannel. He would provide by law that the corpses of all suicides should be furnished to the medical schools for dissection, except when the victims were insane or irresponsible. Dr. Jeannel demonstrates the right of the Legislature to pass such a law, and argues "that it would not only have a beneficial result as a restraint upon suicide, but sensibly aid the schools in their labours."

The Medical Jurisprudence of Inebriety.

Dr. Joseph Parrish confines himself to "Inebriety, the Disease," as distinguished from other forms of alcoholic effects. The inebriate is born with a decided alcoholic diathesis, or with a positive tendency to form one. Such persons are moved at times by a passion for indulgence, which is beyond their control. "Tech-

nically, it is a brain or nerve storm which dominates all other conditions, and leaves the patient for the time without any power to control his acts." This form of inebriation is often found in the professional classes, who vainly strive for liberty. An important symptom of inebriety is "loss or suspension of consciousness and memory, without sleep or stupor, during which the patient acts automatically, being without knowledge of his condition, at the same time appearing to be, and to act naturally." Two examples are given. The phenomenon of unconscious cerebration is seen also in somnambulism, and Dr. Parrish is of opinion that both disorders are due to a want of equilibrium in the same nerve-centres.

Three cases of somnambulism are then related.

The Scientific Study of Inebriate Criminals.

Dr. Crothers says that the sanity or insanity of an inebriate criminal has so far been decided on theory, law, and precedent, and consequently injustice and great wrong is done to prisoners. When an inebriate appears in court as a criminal, and the crime is admitted, certain questions are asked:—Did the prisoner at the time of committing the crime realize the nature and consequences of his acts and conduct? Had he the power of self-control to have done otherwise had he so willed? Were the inebriety and crime voluntary and with motive, or involuntary and without motive? The scientific expert should study the history of the crime and then the crime itself. He should inquire into the hereditary history of the prisoner, his early growth, culture, training, nutrition, and general surroundings, and the origin, duration, and character of the drink impulse. Then the nature and character of the crime and the associate circumstances should be studied. From a study of this kind it will appear that the crime and the inebriety are only symptoms of disease and degeneration, "whose foot-prints can be traced back from stage to stage." Certain general facts are already established to serve as a foundation for more minute study. 1, The inebriety of any person is in itself evidence of more or less unsoundness; 2, In a large proportion of cases inebriety is only a symptom of slow, insidious brain disease; 3, When crime is committed by inebriates, the probability of mental disease is very strong; 4, Spirits used to intoxication, for the purpose of committing crime, is evidence of a most dangerous form of reasoning mania. Some late trials are related, in which Dr. Crothers thinks great injustice has been done to the prisoners. He is of opinion that "the question of responsibility in any given case must be answered exclusively from its scientific side, apart from all legal conceptions and tests in such cases."

Prohibition and Inebriety.

This is a paper by Dr. Mary Weeks Burnett, President of the National Temperance Hospital, who is in favour of a law being passed to prohibit the manufacture and sale of intoxicating liquors

for other than medical, scientific, and manufacturing purposes. She combats the objections, 1st, That prohibition is impracticable; 2nd, That other measures, such as moral suasion, local option, gaols, penitentiaries, and inebriate and insane asylums present a more satisfactory basis for the Medical Jurisprudence of Inebriety; 3rd, That prohibition is not necessary. There is no doubt that the "neurotic cases which so easily drift into disease and crime cannot be the subjects of the disease of inebriety until they have come under the influence of intoxicating liquors," but the fact that neurotic cases are so liable is no argument for stopping the sale of beer, wine, and spirits to the general community, and in England certainly such a prohibitory law is not likely to be passed.

The remainder of the "Medico-Legal Journal" is chiefly taken up with an account of the Transactions of the Medico-Legal Societies of New York and Massachusetts, from which we learn that twenty-seven superintendents of asylums in the States have lately joined the Medico-Legal Society. It is a great pity that there is no such society in England, at which medical and legal matters could be discussed between members of the medical and legal professions. From such discussions there is no doubt good would result.

On Gold as a Staining Agent for Nerve Tissues.

This is a paper in the "Journal of Nervous and Mental Disease," by Dr. Henry Upson. He states that of the two methods of gold staining in use for hardened tissues, one by bringing the section to be stained into a solution of palladium chloride and afterwards into an acid solution of chloride of gold, the other by bringing the tissue, previously hardened by Muller's fluid, into a solution of chloride of gold, and then successively into solutions of caustic soda and potassic iodide, the latter is extremely unreliable. He recommends the following method :—The tissue is to be hardened in Müller's fluid for from two to five months; it is then washed for a few minutes in water, is brought for a day or two into fifty per cent. and then ninety-five per cent. of alcohol, where it should remain for two months or longer, until it has a greenish tinge. It is then imbedded and sections cut. The sections should remain in eighty per cent. of alcohol for a time, varying from a few days to several weeks before staining. The section to be stained is brought from water into a one per cent. aqueous solution of gold chloride, where it remains for from ten to thirty minutes. It is then washed superficially in water, brought for half a minute into a ten per cent. solution of sodium hydrate, washed again and brought into a reducing fluid, where in a few moments it takes a vivid red colour. The reducing fluid is composed of sulphurous acid five cubic centimetres, tincture of iodine (5 per cent.) five to ten drops, solution of ferric chloride (37 per cent.) one drop. The section is

then washed in water and mounted in Canada balsam in the usual way. Sections stained by chloride of gold show the great preponderance of naked over medullated nerve fibres in the grey matter of the spinal cord.

Transactions of the American Neurological Association.

The following papers were read and discussed:—"On a Subcutaneous Connective Tissue Dystrophy of the Arms and Back, associated with Symptoms Resembling Myxœdema," by Dr. F. X. Dercum, of Philadelphia; "Subacute Progressive Polymyositis," by Dr. G. W. Jacoby; "Progressive Muscular Dystrophies, the Relation of the Primary Forms to one another and to Typical Progressive Muscular Atrophy," by Dr. B. Sachs. Dr. Dercum pointed out the difference between his case and typical instances of myxœdema. In the first place, the skin itself was not involved, and secondly, although slight slowing of movement existed, it was not marked. Speech disturbance was present for only a few days, the mind was clear, but the patient irritable. No depression of temperature was observed, except on one occasion, but subjective chilly symptoms were frequently complained of.

Dr. Jacoby remarks that the attention, necessary for the attainment of the knowledge we now have respecting various muscular affections, has been given chiefly to the chronic forms of muscular disorder, while the acute and subacute disorders, especially the inflammatory ones, have been markedly neglected. He relates a case "showing microscopically not only the characteristics of acute and subacute inflammation, but also many of those found in the chronic forms of primary dystrophies," and endeavours to trace a relationship between acute and chronic primary muscular affections. He sums up the results of his examination of the case as follows:—

1.—The process is an acute myositis and perimyositis, grafted on a chronic plastic or formative process.

2.—The plastic process has led to a new formation of connective tissue of the perimysium externum as well as of the perimysium internum.

3.—The result of the chronic process is fatty and waxy degeneration.

4.—Neuritis and perineuritis are secondary to myositis and perimyositis.

He then reviews the acute secondary imflammatory muscular disorders, and the acute primary, or so-called idiopathic disorders, and concludes that in his case there was "a form of primary myopathy, closely allied, if not identical with some forms of primary progressive muscular atrophy."

Dr. Sachs says that the term "Progressive Muscular Dystrophy" "is intended to designate those forms of disease in which a primary progressive wasting of some or all of the muscles of the body is the

most characteristic feature, and in which this wasting (atrophy) may or may not be associated with true or pseudo-hypertrophy of some muscles." He has been led to the following conclusions :—

1.—Progressive muscular atrophy, of the type Aran-Duchenne, is due to spinal cord disease.

2.—Duchenne's type of progressive muscular atrophy might be termed the hand type, while the peroneal form would represent the leg type.

3.—Pseudo-hypertrophy is not of spinal origin.

4.—There is a close relationship between pseudo-hypertrophy and Erb's juvenile form of progressive muscular atrophy, but not an absolute identity.

5.—Hereditary muscular atrophy does not deserve the rank of a separate clinical entity, all kinds of primary myopathies being occasionally hereditary.

6.—The type Landouzy and Déjérine is closely related to Erb's form, the additional involvement of the face muscles not being a sufficient basis for a marked clinical differentiation.

7.—Pseudo-hypertrophy and Erb's form should be regarded as the two representative forms of primary progressive dystrophies.

8.—Primary progressive dystrophies are distinguished from spinal progressive dystrophies by their cardinal symptoms—the onset at an early age, the occurrence of true or false hypertrophy, the absence of the reaction of degeneration, and the absence of fibrillar contractions.

He proposes to classify muscular atrophies as follows :—

1.—Amyotrophia spinalis progressiva.
   a. Hand type.
   b. Leg type—peroneal form.
2.—Primary progressive dystrophies.
   a. Pseudo-hypertrophy.
   b. Erb's form.

(To be continued.)

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4. *Colonial Retrospect.*

By D. Hack Tuke, F.R.C.P.

The second Session of the Inter-Colonial Medical Congress of Australasia was held at Melbourne, Victoria, in January, 1888, from the 7th to the 12th inclusive. According to general arrangements, the Congress meets once in three years, but as the Centennial Exhibition was to be held in Melbourne in 1888, it was decided at the close of the first Session, held in Adelaide, South Australia, to hold the second Session somewhat earlier than usual. The third Session will be held in Sydney, in September, 1892, and Dr. H. Norman MacLaurin, Medical Adviser to the Government of New South Wales, and Vice-Chancellor of the University of Sydney, has been elected President.

A section devoted to psychological medicine was constituted for the first time, and the officers were: President, Dr. F. Norton Manning, of New South Wales; Vice-Presidents, Dr. E. Hacon, of Christchurch, New Zealand, Dr. Alex. Paterson, of Adelaide, South Australia, and Dr. Scholes, of Goodna, Queensland; Secretary, Dr. Beattie Smith, of Ararat, Victoria.

The Presidential Address was delivered before the members of the Congress by Dr. Manning, in the Nelson Hall, at the Melbourne University, on Friday, February 11th.

Dr. Manning's address constitutes a very valuable contribution to the statistics of insanity in Australia, and raises the question: Is insanity in Australia increasing in proportion to the general population? His answer, based on as perfect returns as he has been able to obtain, is in the affirmative. Whatever increase there has been during the last decennium has been slight, and is explained by the accumulation of chronic cases. There is no proof whatever of the actual increase of "occurring insanity." When we take the proportion of the insane to the population in the Australian Colonies on December 31st, 1877, and compare this with the corresponding numbers on December 31st, 1887, we find that at the former date, the ratio of the insane to the population was 2·80 per 1,000, or 1 in 356, while at the latter date it was 2·86 per 1,000, or 1 in 349. It is obvious that a very slight allowance need be made for the effect of accumulation, and with such allowance it may be safely held that there has been no increase in the number who become insane. It is interesting to note how nearly these figures correspond with those of Great Britain and Ireland, where the proportion in 1887 stood at 1 in 342, or 2·92 per 1,000. If we discriminate between the Colonies, we find the highest ratio in Victoria, and the lowest in South Australia. Then if we take the still more important returns of admissions to the population of the ten years, 1878-87 (inclusive), we observe that it has been as follows:—1878, 1 in 1,550; in 1879, 1 in 1,538; 1880, 1 in 1,560; 1881, 1 in 1,619; 1882, 1 in 1,677; 1883, 1 in 1,834; 1884, 1 in 1,772; 1885, 1 in 1,737; 1886, 1 in 1,751; 1887, 1 in 1,738. Average for the period, 1 in 1,690. It will be seen that so far as we can regard admissions as representing occurring insanity, there has been a decrease of mental disorders. We should like to know how many of the total admissions are transfers, or readmissions. If these, however, are included, they would strengthen instead of weaken the conclusion that insanity is not on the increase in Australia. Only 23·12 per cent. of the insane in asylums were born in Australia. More than 26 per cent. are from Ireland, 26 per cent. from England, 6 per cent. from Scotland, 2 per cent. from Germany, and 2 per cent. from China, there being about 14·5 per cent. "from other countries and unknown." The pleasant conclusion is reached that the Australians are less likely to become insane than the members of other races in Australia.

As regards the recovery- and mortality- rates of the insane in

Australian asylums, the former was 42·09 per cent., calculated upon the admissions. In English asylums the ratio for the corresponding period was 40·04 per cent. It is pointed out by Dr. Manning that in English statistics idiots are eliminated when the recovery rate is calculated. At the same time, although idiot asylums are not reckoned, the large number of idiots and imbeciles in our county asylums are included. The mortality rate is stated to be 7·09 per cent. of the mean number resident. In England the corresponding figure was 9·58 per cent; a favourable comparison, due, according to Dr. Manning, to the warmth and equability of the Australian climate.

In regard to the types of insanity, statistics show that general paralysis is much less common in Australia than in England, but that it is, without doubt, becoming more frequent. During 1887 the proportion of general paralytics to total admissions was 1·8 per cent. In the asylums of England it was for the same year 8·6 per cent.

Epilepsy in association with insanity is fortunately a disease much less common in Australia than in England.

It is agreeable to find that the lunacy laws in Australia are, on the whole, "satisfactory, sufficient, and well abreast of the times." These are in no way behind, and, in some respects, ahead of the legislation in Great Britain, the United States, Canada, and the principal European countries. In the provision of reception houses in New South Wales and Queensland, and in lunacy wards in public hospitals in Victoria for the treatment of insanity in its earliest stages, the statutes are decidedly in advance of those in Great Britain.

Dr. Manning takes the opportunity of protesting against the changes advocated at the present time in England, and which have found expression in the Lunacy Bill, now once again introduced in the British Legislature.

We regret our space does not allow of our quoting largely from Dr. Manning's highly interesting and carefully thought-out discourse.

We cannot, however, omit the following passage on the systematic training of attendants and nurses for their special duties :—

> This training should include a knowledge of general as well as special nursing, and to this end the general hospitals should render us assistance by receiving, for definite periods, our attendants and nurses for training on their staff. So far the system is in its infancy in these Colonies, but Dr. Sinclair and Dr. Ross, who have been working for two years at Gladesville, are more than gratified with the result, which, to my mind, is most satisfactory. The effort to improve the qualifications of those in immediate attendance and care of patients promises great benefit to the insane, and I am making no rash prediction in saying that within another decade no attendants or nurses will be employed in State hospitals for the insane in these Colonies, except as probationers, who have not gone through a systematic course of training and instruction in their duties, and received certificates of their fitness for their special work.

The Sectional Meetings were held in one of the class rooms of the University, on the 8th, 9th, and 10th of January, when the following papers were read :—

1.—"Sporadic Cretinism," by Dr. F. N. Manning, of Sydney.
2.—"Six Cases of Sporadic Cretinism," by Dr. E. C. Stirling, of Adelaide.
3.—"Nationality and Insanity in New South Wales," by Dr. Chisholm Ross, of Gladesville.
4.—"Insanity in Australian Aborigines," by Dr. F. N. Manning, of Sydney.
5.—"Dipsomania and its Allies: their Etiology and Treatment," by Dr. Patrick Smith, of Brisbane.
6.—"The Curability of Insanity," by Dr. Eric Sinclair, of Gladesville, New South Wales.
7.—"Australian Asylums: their Management in the near future," by Dr. W. L. Cleland, of Parkside, South Australia.
8.—"Lunacy Legislation in the Australian Colonies," by Dr. Armstrong, of Melbourne.
9.—"The Training of Asylum Attendants and Nurses," by Dr. W. C. Williamson, of Parramatta, New South Wales.
10.—"Treatment of Well-to-do Insane on the Cottage Principle," by Dr. W. H. Macfarlane, of New Norfolk, Tasmania.
11.—"The Extension of Hospital Methods to Asylum Practice," by Dr. Eric Sinclair, of Gladesville, New South Wales.
12.—"The House of the Insane, with special reference to the Boarding-out System," by Dr. Beattie Smith, of Ararat, Victoria.

The officers of the lunacy department in Victoria entertained their visitors from the other Colonies in a most hospitable manner, and facilities were afforded for visiting the Victorian institutions for the insane.

The cottages recently erected at the Metropolitan Asylum, Kew, for the imbecile and idiot class were thoroughly inspected, and met with general approval. In these, under Dr. McCreery, a system of education, after English and American models, has been started, and a trained teacher from the Lancaster Asylum is at work.

The occasion was the first on which the officers of Australian asylums—some of whom travelled very long distances to the Congress—had an opportunity of making the personal acquaintance of their *confrères*, and discussing matters appertaining to their specialty.

The second Session of Congress is regarded as a most successful

one, and the pyschological section contributed not a little to this. The arrangements made by the Secretary, Dr. Beattie Smith, who was indefatigable both before the Session and during its progress, were, in all respects, admirable, and a special vote of thanks was accorded to him at the conclusion of the last Sectional meeting.

The Victorian Government, with great liberality, has voted a sum of £500 to publish the transactions of the Congress.

The Report of the Royal Commission on Lunatic Asylums of the Province of Quebec, 1888.

This Report, addressed to the Lieutenant-Governor of the Province of Quebec, has been prepared by the Commission appointed September 17th, 1887, in conformity with the Statute 32 Vic., chapter 8.

To those acquainted, from personal inspection, with the bad management of certain Canadian asylums, the conclusions arrived at in this document will be read with the greatest interest. An important lunacy law was passed in 1885 with the object of removing the abuses which had marred the benefits otherwise resulting from these institutions, which, we have never denied, had some good as well as many bad features.

The ecclesiastical authorities have, as might be expected, maintained that this law has taken away certain vested rights under their contract with the Government. The Commission accepts these statements, and proposes that the Government should restore their rights to the lady directors of St. Jean de Dieu, near Montreal. It would seem, however, that the latter have broken the implied contract with the Government, which surely preproposes that patients under their charge should be properly treated. As this was notoriously not the case, the Government was surely justified in lessening that autonomy which these ladies had so lamentably abused.

To the question: Has the law of 1855 been put into force? the Commissioners reply that the evidence taken before them shows, beyond a doubt, that in its most essential provisions it has been entirely disregarded. "The refusal of the proprietors to obey the law, and the impossibility in which the Government was placed of carrying it out, produced results unfavourable to the insane" (p. 80).

As to the remedies to be applied to this state of affairs:—

> The Commission is of opinion that the sole remedy is the repeal of the Act of 1855 and all prior legislation (Statute of 1851), and the enactment of a general law on asylums. Some clauses of the previous law and certain changes, recommended by the Commission, might be retained. Special attention should be given under the new Act to be introduced to the medical service for each asylum, and it should contain the enactments which are now found in the laws on this question in every other country (p. 80).

In the case of the Beauport Asylum, at Quebec, the Com-

missioners have no hesitation in recommending that the contract between the Government and the asylum should be cancelled, on the ground that the proprietors have not fulfilled its conditions. "Should the finances of the Province permit of it, the Government might, under the circumstances, acquire this property and hand it over to some religious community which would be under the absolute control of a medical board" (p. 81).

Although the managers of the asylums had every opportunity of preparing them for the visits of the Commissioners, and no doubt their condition was temporarily improved, the Report before us reveals a very unsatisfactory state. Mechanical restraint is abused, and is left to the discretion of the keepers. In one room at the Beauport Asylum, the register, although not regularly kept, showed that there were twenty-one patients restrained, and in another, fourteen.

It is clear that the reforms which we pointed out as absolutely necessary in some of the Canadian asylums are still urgently required. It seems to us greatly to be deplored that the Government has been so feeble in its attempts to carry out the law. We trust that the ultimate effects of this Commission will, to a certain extent, be beneficial, especially in regard to the Quebec Asylum, but we regret that in some degree it seems to have yielded too readily to the representations made by interested parties.

PART IV.—NOTES AND NEWS.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The Quarterly Meeting of the Medico-Psychological Association was held on Thursday, the 14th of March, at the Retreat, Heslington Road, York, the President, Dr. Clouston, in the chair. There was a numerous attendance. The following were elected new members :—Charles Brown, M.R.C.S., L.R.C.P., 9, Baskerville Road, Wandsworth Common, London; David Finlay, M.D. (Glas.), Assistant Medical Officer, County Asylum, Bridgend, Glamorganshire; John Warnock, M.D.C.M., B.Sc., M.R.C.S., Medical Superintendent, Northumberland House, Finsbury Park; James Robert Barton, L.R.C.S.I. and L.K.Q.C.P.I. and L.M., Senior Assistant Medical Officer, South Yorkshire Asylum, Wadsley, Sheffield; Nathan Raw, M.D., Assistant Medical Officer, Kent County Asylum, Barming Heath, Maidstone; William Ledington Ruxton, M.D. and C.M., Assistant Medical Officer, South Yorkshire Asylum, Wadsley; James Richard Whitwell, M.D. and C.M., Assistant Medical Officer, Wadsley, South Yorkshire; Alfred Turner, M.D. and C.M., Assistant Medical Officer, West Riding Asylum, Menston, Yorkshire; John Arthur West, L.R.C.P., M.R.C.S., and L.S.A., 113, King Henry's Road, London; Wm. Arthur Moynan, M.D. and M.Ch.I., Resident Medical Officer, Wyke House, Isleworth; C. Fred. Bailey, M.D., Lond., M.R.C.P. Lond., Assistant Medical Officer, Devon County Asylum, Exminster; C. F. Bailey, M.D. and M.R.C.P. Lond., Assistant Medical Officer, Devon County Asylum; Edward Spencer Blaker, B.A. Cantab.,

M.R.C.S. Eng., and L.S.A. Lond., Senior Assistant Medical Officer, Wiltshire County Asylum, Devizes; Gerald S. Samuelson, M.B. and C.M. Edin., Junior Assistant Medical Officer, Wilts County Asylum; Henry Joseph Hind, M.R.C.S., L.S.A., Assistant Medical Officer, the Retreat, York; Fred Keyt, M.B., C.M. Aberdeen, Clinical Assistant, West Riding Asylum.

Amongst those present were Drs. Clifford Allbutt, Bower, Fletcher Beach, R. Baker, J. A. Campbell, C. McIver Campbell, Christie, W. H. Candler, Crochley Clapham, W. J. Dodds, Hood, C. Hitchcock, C. K. Hitchcock, Tregelles Hingston, Howden, W. S. Kay, J. Keay, Keyt, Lofthouse, Ley, J. C. Mackenzie, Macleod, J. G. McDowall, S. W. North, Hayes Newington, W. R. Nicholson, Petch, Evan Powell, Rees Philipps, T. L. Rogers, Rutherford, H. E. Spencer, C. D. Symes, Percy Smith, T. Smith (Sedgefield), Swanson, Savage, Turnbull, E. M. Taylor, Hack Tuke, C. M. Tuke, Urquhart, J. M. Williams, Wallis, Wiglesworth, Whitcombe, Yellowlees, etc.

The PRESIDENT said he had received a letter of apology from Dr. Needham, the ex-President, who was unable to be present.

Dr. CLIFFORD ALLBUTT was called upon to read the first paper—"Insanity of Children." He said that insane children, unless grievously affected, could generally be managed at home, and thus escape the systematic watchfulness of medical officers of general asylums, and they were, on the other hand, not defective enough to be sent to idiot schools. If insanity in children was not very common, it was at any rate far from rare, and even melancholia itself might find its seat in their hearts. The insanity of children could not have a large quality of reflection; the delusions of children could not have much elaboration; the mania of children could not be constructed on the scheme of the mania of adults. The child's insanity must be an insanity of the senses, and of the simpler impressions, and of the lower and more early organized centres. The group of morbid phenomena would vary with the age, and he said this because they were liable to extract one or more prominent symptoms, and measure similarities and dissimilarities by that, and ignore the truth that maladies were groups of phenomena, and were no more to be classified by single prominent elements than were animals. For instance, the strange occurrence of suicide or homicide in children was not to be taken to identify the insanities which had those terminations in children and in adults. Suicide or homicide in children were unreflective acts. Healthy children enjoyed stories of carnage and even of cruelty, which brought to them the searchings of curiosity and the love of adventure. In the same way to children brought up in safety and peace the very meaning of danger might be long unknown. Thus it was that the child drowned itself to escape a whipping, fled from the known to the unknown, as it would fly through any open door reckless of its outlet. That kind of act had but a superficial resemblance to the suicide of a middle-aged man, who saw in death a release from intolerable sorrows or the extinction of an intolerable pain. In a child's mind there was no definite boundary between the real and the unreal. Day dreams which in an adult would be absurd to the degree of insanity were to a child realities. When very young a child seemed to live in phantasy; even its own self was to itself a ghost. It would address its own solid body by another name as something other than itself, as a companion or confidant of its inner being. Pretty were the fancies of a child, yet its healthy growth consisted in their evaporation. If the growth of the mind were something less or something other than healthy, then those fancies kept their empire. Delusions they were not. Scarcely even in an etymological sense, being rather persistencies than perversions. The affective life was a large part of the being of children, and they saw, as they would expect to see, the effects of disturbance therein rather than in the sphere of thought, which in those children was rudimentary. The common mania of adults was, so far as his experience went, extremely rare in children; but he had seen many cases in which might be traced the outlines of a sort of recurrent mania. If they descended to the lowest stage of visible human life—to the baby—they found

that insanity betrayed itself first and almost entirely in its own active muscular groups, in its one place of contact with external things. The insane baby bites, and biting was the range of its symptoms, the external measure of its madness. Epilepsy in children, as in adults, was often replaced by actions of a more complex order, such as sudden attacks of destructiveness or other tempers. Insanity in children was practically always hereditary, though bad bringing up might largely conspire with original tendency to produce the result. The prognosis of insanity in children must, of course, be very variable, and be least hopeful in destructive cases and cases of defective moral sense. Still, if they took the average run of children of not very defective organization or very automatic habits, reasoning usually took place in two or three years under judicious management, liberal instruction, and hygienic method of life. Judicious management, which was the most essential condition of amendment, was, however, very difficult to obtain.

The PRESIDENT said he was sure they would all feel indebted to Dr. Clifford Allbutt for his most interesting paper. It conveyed a great deal of information, of which they would be the better for having. Like all that Dr. Clifford Allbutt wrote, it was full of suggestion. They had not a great deal of time for discussion, but he had no doubt there were some gentlemen who had had some experience in these maladies of children, and they would be extremely glad to hear what they had to say. His own experience somewhat agreed with the general lines laid down by Dr. Clifford Allbutt. He had hoped that Dr. Allbutt would have brought into relationship with the insanity proper of children the very common condition of the delirium to which certain young children were subjected whenever their temperature rose in the least degree. He believed there were a certain number of children whose brains were so constituted that their temperature never rose above 100°, but they absolutely lost consciousness and became delirious, especially at night-time. In regard to the melancholia of children, he was rather struck with what Dr. Clifford Allbutt said in the first part of his paper respecting the reasons why they attempted at times to commit suicide. Naturally the imaginativeness of children should prevent them from committing suicide. There was no doubt that children had no natural tendency towards suicide. He thought that perhaps, in explaining some of the causes of attempted suicide in children, they had really to go back to the primary instincts of human nature. These children seemed to be deprived for the time being of the primary instinct of all living beings of the love of life, and the desire to prolong that life. He mentioned one or two cases of children who at six, seven, or ten years of age possessed intellectual faculty to a large extent, but morally were in the position of mere babies, a particular part of the nervous development not having taken place.

Dr. FLETCHER BEACH said the form of insanity which he had found most common in children was acute mania. He had a case at present of a boy who became insane, and after the insanity had passed away he had to be sent to an institution. A common form was that of moral insanity, and these were the cases they found most difficult to treat. Cases of acute mania should not be sent to an asylum for imbeciles. He remembered when the British Association met at Brighton Dr. Cobbold related two or three cases in which children had attempted suicide, and the most important point raised was the very slight cause which produced the result. One boy was not permitted to go to an entertainment one night and the next day he committed suicide by drowning himself. He did not think the child who committed suicide could have a fear of death. Another common form of insanity was that in which children were like animals, not only biting other people, but biting their own arms. When they got into a passion and found they could not bite anyone else, then they began biting themselves. He (Dr. Beach) had been very much pleased with Dr. Clifford Allbutt's paper.

Dr. SAVAGE said he quite agreed with Dr. Clifford Allbutt. After briefly referring to Romanes' book on "Evolution of the Mind," he said they

could not help being struck with Dr. Clifford Allbutt's remarks on infantile insanity, and he was very pleased that Dr. Allbutt had recognized it so clearly. He remarked that whenever one got a distinctly insane baby it was muscularly insane. He mentioned the case of a child who was timid of heights or railway trains, rendering it almost impossible for the child to be carried about. It was a matter of careful training to get it into youth and manhood. He went on to say that there were cases of most frightful development of sexual desire. Such cases called for most earnest and energetic treatment, and he was afraid that even with the most careful treatment many such cases went wrong. What were they to do with the child of five or six years of age who had begun to teach her brothers to act immorally? The difficulty in such cases was in preventing children from indulging in bad habits. The very fact of training them to keep right made them conscious of the wrong. Therefore he was still in doubt as to the proper way in which to keep them right. He quoted an instance of a child who had committed an offence in the presence of its father and himself. The father presumed that he (Dr. Savage) would be astonished, and said, "If I had thrashed the child he would have remembered. As I neglected that, we may hope the chances are that he may forget." They wanted to make children as unconscious as possible. Therefore it was easier to suggest a principle than to carry it out into practice. He quoted a case of heredity in which the children (a boy and girl) were simply allowed to live together like little beasts, and when they were brought to him they were most monkey-like. The boy seemed to be the brighter of the two. He got him taken charge of by a lady who was connected with a convent, the boy being a Roman Catholic. The association, so far, had been satisfactory, for after three months he was surprised to see what could be done in a case of this kind. The sister was placed in a small convent school and was also doing well. At first there was restlessness and untruthfulness, but one favourable point was the absence of sexual vice. Dr. Tuke had described cases of interest, in which, by means of association, the delusion of the mother had become the delusion of the child. One was also impressed with what had been said regarding the connection between the rise of temperature in neurotic children and delirium and violence. There were, he was sure, cases where children had been said to have become weak-minded after an attack of measles—an attack of measles with delirium passing into acute mania, which damaged the organs of the mind permanently, and from that time the child passed either into imbecility or weak-mindedness.

Dr. Yellowlees said he thought there would be the most practical gain by bringing forward actual cases, and mentioned one of melancholia in a child of seven years who had a fear of death, and felt too wicked to eat, and too wicked to live. At so early an age that was a rare occurrence. The treatment had been very satisfactory and the child was now perfectly well. Another case which came to him was that of a child who indulged in all kinds of mischief and cruelty. He had the child sent away to a farmhouse, and the result proved to be very satisfactory. But an explanation was afterwards given to him by the parents, namely, that the acts of mischief were all due to a wicked nurse. The child, ever since the nurse left, had been perfectly well (laughter).

The President then called upon the author of the paper to reply.

Dr. Clifford Allbutt said he had not ventured upon relating cases, but had gone into principles. The tendency to delirium in some febrile cases was, of course, not confined to children. He had had a case in his rooms that day where the patient became feverish and delirious under slight causes; but the question of delirium had as yet to be worked out. As regarded sexual children, he would just say, in commenting upon what Dr. Savage had said, that he thought those children on the whole did very much better than they expected. In chamber practice those children were brought to them very often. He was thankful to say that the sexual inclination could be got rid of in childhood. Children did not want arguing with. He believed they did well when they were simply told distinctly that a certain thing was wrong, and that they were not to do it. Such children, of course, did want caution; and those persons, if they married,

expressed their great thankfulness for the care that had been taken with them when young. He should venture to deny the remark made by the President that children had great imaginations. He did not think that they could have much imagination. He thought they had strong feelings, but of constructive imagination they had none. He went on to say that there was implanted in all animals a most extraordinary desire for self-preservation. He remembered the death-bed of an English Bishop, who had a very strong conviction regarding heaven. But he also had an intense desire for self-preservation, and the Bishop was delighted to be told that he was better, and at once brightened up.

Dr. BAKER said he was asked to see a little girl five years of age a short while ago. Her mother, when the child was about three years of age, committed suicide, and the child was the first to go into the mother's room and find her dead. The father married again, and the child took a dislike to her step-mother. She not only had a tendency to commit suicide, but made an attempt to commit homicide when the new mother had a child. She climbed over her step-mother when in bed, whilst she was asleep, and tried to get at the baby. In that case there was evidence of the child having been perverted by a nurse of bad habits. He had never seen a case before where a child of five had attempted both suicide and homicide.

Dr. R. BAKER read a paper on "Ten years' experience in the use of the Turkish bath in the treatment of mental disorders."

Dr. CROCHLEY CLAPHAM said that Dr. Baker had shown considerable courage in dealing with that subject, as hitherto very few superintendents of asylums would touch it; they felt they were not equal to it. There was a Turkish bath at Wakefield, but he believed it was not in use. As regarded his own experience, he found that Turkish baths were beneficial in regard to melancholia which arose from a dry skin.

Dr. MACLEOD referred to what he had seen at the Cork Asylum. He said that Dr. Eames had not only a Turkish bath fitted up for the direct treatment of patients, but that he had all the ordinary cleansing of patients done by means of the Turkish bath. One thing which occurred to him in the Cork Asylum was that all the patients had a healthy skin—a much brighter looking one than any other patients he had ever seen. With regard to asylum smells, to which reference had been made, he did not think they were to be found in lunatic asylums to any greater extent than in any other large institutions.

Dr. SAVAGE said that in the United North Wales Asylum they had a Turkish bath which was used freely. The patients went up in companies of from 20 to 30, and it seemed to him that the Turkish bath was invaluable in some cases. Persons who were miserable were relieved of their misery, and the whole world seemed to be changed to them. He had seen cases of senile melancholia clear away with the use of one or two baths. He quite agreed with Dr. Baker, and should certainly like to see Turkish baths introduced into Bethlem, and, indeed, all their asylums.

Dr. YELLOWLEES asked if Dr. Baker had ever heard of any cases in which harm had been done?

Dr. BAKER replied that he had not.

The PRESIDENT remarked that if it could be shown that Turkish baths were a benefit he had no doubt they would be generally adopted as a means of treatment.

Dr. Watson's paper on "Notes on the Use of Sulphonal" was read by Dr. URQUHART.

The PRESIDENT said sulphonal unquestionably was one of the best hypnotics that had recently been introduced. Sulphonal, without a doubt, was to be one of the drugs on which they were going to rely in many of their cases of melancholia. It had no evil effects, no taste, and no smell. Perhaps in some few of the cases it produced a little diarrhœa. Taking it altogether, he believed it would be one of the drugs of the future. They had all been looking forward to the day when they should procure a hypnotic drug which should produce a natural sleep, and if sulphonal was nearer that perfect hypnotic of the future than any other he was quite sure they would all welcome it as a great addition.

Dr. PERCY SMITH said he had lately used sulphonal at Bethlem in fourteen cases, and his experience had been similar to Dr. Watson's. Sleep had been secured for six or seven hours, and one dose of forty grains produced sleep for the whole night. He had not found diarrhœa in any of the cases he had used it in. On the whole the effects had been good. He had given it in milk.

Dr. YELLOWLEES said he had seen dizziness in the morning in certain cases, after a thirty grain dose.

Dr. URQUHART then read a paper on "A Case of Attempted Suicide."

The PRESIDENT said he was afraid they had not time to discuss the paper. It opened up many interesting questions, and they would have an opportunity of studying them when the paper was published in the Journal.

On the motion of the PRESIDENT a hearty vote of thanks was accorded to the Committee of the Retreat for allowing the members to hold their meeting there.

THE DINNER.

The members and friends subsequently dined together at the Station Hotel, to the number of nearly 100. After the usual loyal toasts,

Mr. G. S. GIBB, in an appropriate speech, proposed the toast of the evening, "The Medico-Psychological Association of Great Britain and Ireland."

The PRESIDENT responded in a very telling address. The Association, he observed, had met twice previously in the ancient city of York, viz., in 1844, under the presidency of Dr. Thurnam, and in 1869, under that of Professor Laycock. He referred to the appropriateness of their meeting there, inasmuch as there was no doubt whatever that the great philanthropic movement, which was the chief stimulus in the past history of that department of medicine, originated in York, when the Retreat, a hospital for the insane, where they received the kindest treatment, was projected in 1792 by William Tuke, whose action eventuated in the reform of the treatment of the insane, and the modern lunacy laws. York, the President said, was the very Mecca of the mental physician. They might well take a pilgrimage, not only every twenty years, but very much oftener, to the city of York, to visit the Retreat and muse on the great things the Retreat and the ideas embodied in it had done for their department of medicine and for the welfare of the insane. Then the philanthropic movement was taken up by the late Lord Shaftesbury. (Applause.) And succeeding that came the public lunatic asylums, the like of which scarcely existed in any other civilized country in the world. There were now existing in Great Britain over eighty of such institutions. The philanthropic movement having brought the insane into the category of sick persons, the proper provision had been made for the treatment of persons sick in mind, just as hospitals were prepared for the treatment of bodily diseases. There was no doubt that public institutions for the treatment of insanity were about to pass through a crisis in their history—a crisis which it would not become him to pass over in silence. Hitherto, as they knew, these institutions had been under the control of the magistrates of the various counties selected for their social position and other qualities by the Lord Chancellor; and those magistrates, as he thought they could all bear testimony, had done a great work in setting up and guiding the institutions for the insane throughout the country. (Applause.) The control of those magistrates was about to become a thing of the past; and in acknowledging the services of those magistrates, he ought also to mention the Commissioners in Lunacy, who had been presided over by Lord Shaftesbury over forty years. They had, he believed, conceived the right theory, and acted on it in practice. They had placed at the head of each institution a responsible professional man to govern the institution. It was not for the medical profession to boast of what had been done; but they might say this, as it was a mere matter of fact, that men from the Continent of Europe and from America had come over here, and were coming year by year, to see those institutions for the care of the insane, and how they were conducted, and their report with regard to them had been almost uniformly favourable, and they had imitated them very largely both in their own institutions and the government of them. In so far as they had imitated them they had been successful.

(Applause.) He (the President) had no fear for the future. He did not believe that any governing body of British men selected by the ratepayers as a country would go back on what had been done in this great movement. He did not believe the public of the country would allow them to go back. He believed that the movement would be continuously progressive, but at this crisis there was no doubt that the members of that Association would have somewhat of a difficult process to accomplish. They, in fact, would have to put their shoulders to the wheel and educate their new masters—(laughter and applause)—and that process of education, he thought, would be possibly a very pleasant and a very interesting one. (Laughter.) He believed they would now be able to show what was in them in a way that they had not had an opportunity of doing on account of their previous successes. The privilege would be accorded to them of demonstrating to their new masters that this was a great medical and a great philanthropic movement, that they were the guardians of one of the most afflicted classes of human beings, and that they stood in the relation to those poor people not only of guardians, but of mental physicians. If they demonstrated this, and got their new masters to become proud of those institutions, as the magistrates had been in the past; if they caused them to feel they were helping to do a great work in the world, he did not believe for a moment the new representatives of the ratepayers would be one whit behind their predecessors in the way in which they would uphold the institutions for the insane throughout the country. (Applause.) It was the poor who benefited by these institutions—that was one of the things they would have to demonstrate, and if their new County Councils and their representatives on the management of the asylums did not do their duty, he believed the medical profession had merely to appeal to the people themselves for a backing in this great work. As to the future of their department of medicine, it did not do to prophesy until you knew, but he would say this, that there was what they might call the technically scientific aspect of mental and brain disease, the study of which they must each and several take hold of and do their best to advance. They had passed through the philanthropic movement, and the shadow of that would always remain. No man, he said, could ever be a proper head of an institution for the care of the insane who was not a humanitarian. (Applause.) Having constructed institutions and governed them well in a practical way they had solved two most important scientific problems. They did for their insane patients what every sane man should have the sense to do for himself, but which he did not always do. They gave their patients proper diet, a due amount of suitable work, and proper recreation, and made the conditions of their lives antagonistic to their diseases, and by those eminently scientific means they had secured an amount of comfort and happiness for the insane which they could have attained in no other way. But they, the medical profession, could not stand still; nothing in science could stand still. They now had to face the study of the mental functions of the brain, and the disease of those functions, in a scientific way—they had to study them from the point of view of pure and technical science. (Hear, hear.) Let them engraft that on the practical and philanthropic movements of the past, and then he should look for a still more brilliant future for this Association. If there was any truth in the old metaphysician's adage that "There is nothing great on earth but man, and there is nothing great in man but mind," then surely there must be some truth in this—that in practical medicine the highest department was the care of the mind; and if they who had the care of the mind, not merely the care of the insane mind, but the general hygienic care of the mind, were in any degree the high priests of the mental health of the people, it was a very high and most important department of the science of medicine, and as medicine advanced, and their knowledge increased, when they were better able to speak as to the treatment and prevention of mental disease than they were at present, he had no doubt whatever that that would become one of the most important departments of medicine, and one of the very highest aids to humanity. (Loud applause).

LEGAL TESTS OF CRIMINAL RESPONSIBILITY.

Mr. Clark Bell, the President of the Medico-Legal Society of New York, has recently read a paper before that body entitled "The Recent Judicial Departure in Insanity Cases," in which he discusses the general question of the legal tests of criminal responsibility. He passes in review the legal dicta and some of the principal trials in England bearing upon the plea of insanity, and pays a just tribute to the well-known work of Sir James Stephen, whom he regards as representing the ablest and best legal views upon the subject, more especially in reference to the answers of the judges in 1843 to the questions propounded by the House of Lords. As everyone knows, the pivot on which these answers turn is the making of the knowledge of right and wrong the test of responsibility of the accused. Mr. Bell observes that in some of the American States the judiciary have followed the practice of the English judges, and charged juries in accordance with this principle. Many writers in America, however, denounce this test as strongly as the English medical profession has done, and hold it to be inconsistent with the progress of science, the civilization of the age, and the well-known experience of mankind. Lord Bramwell's dogmatic utterances are vigorously combated by Mr. Bell, who replies to his doctrine that "because the insane in asylums can be influenced by threats in the control of their conduct, they are under the law's threats, and therefore responsible," as follows: "I concede that they are constantly so influenced, but where does this lead to? Not necessarily to responsibility. Would Baron Bramwell say that, under the law of England, an incurable lunatic, an inmate of an asylum, should be hung for the homicide of a keeper, physician, or even another inmate? Has such a thing happened? Can it occur? Yet the law threatens him. He knows right from wrong, and knows he is doing wrong, and he is influenced by, and is under threat of, the law, if Baron Bramwell is correct. It is a question of degree, this power of the will. A homicidal or suicidal lunatic threatened with a strait jacket by his keeper, or with hyoscyamus by a physician, might be able to abstain from a given line of forbidden conduct in an asylum, and yet be wholly unable to resist killing another in the one case or himself in the other, if the watch upon him was intermitted an instant. The ability to comprehend the law's threat must be considered in connection with, and in relation to, the will-power of the lunatic to resist or overcome the impulse or delusion. Does the delusion dominate the will? Could he help it? should be the question." It is scarcely necessary to say that this is the view which has been always taken by the medical profession in England. It is satisfactory that an acute lawyer on the other side of the Atlantic should impress upon his countrymen its superiority over the legal test. The celebrated American alienist, Dr. Ray, was constantly urging the importance of recognizing the true test of responsibility. The most satisfactory fact, however, is what Mr. Bell treats of as "the recent judicial departure in insanity cases." Two notable trials recently occurring—the one of Parsons in Alabama, and the other of Daly, in the District of Columbia—are adduced as indications of the departure referred to. Full details of these cases are given. It is, however, not necessary to do more than state that, in his charge to the jury, Judge Montgomery laid it down that if they were satisfied from the evidence that Daly, who was charged with murder, "was mentally afflicted so that he did not know right from wrong as applied to the act, or if he did know, but by reason of the duress, the stress of his mental disease (if he had any) he had no power to choose, no power to avoid doing what he did, and if the homicide was the product of his mental condition solely, or if, by reason of the insane delusions which he had been harbouring (if any), he had reached that condition of mind where the morbid impulse to kill became irresistible, and existed in such violence as to subjugate his intellect, control his will, and render it impossible for him to do otherwise than to yield and do as he did, then he was not to be held accountable." It will be seen that while this charge cites the English judicial test, it is so qualified and broadened that it comprises all that a medical man conversant with insanity would demand. In the other case, that of Parsons

indicted for murder, Judge Somerville delivered an elaborate historical statement in the Supreme Court of Last Resort in Alabama, and departed from the beaten track of the lawyers by questioning whether there may not be an insane person who, while capable of perceiving the difference between right and wrong, is, as a matter of fact, so far under the duress of a diseased brain that the power to choose between right and wrong is destroyed. The judge expressed the opinion that such a one, although he perceived such difference, was not criminally responsible for an act done under the influence of such controlling disease. The judge quoted with approval a passage from Bucknill and Tuke's "Manual of Psychological Medicine," in which it is stated that the true test is "whether, in consequence of congenital defect or acquired disease, the power of self-control is absent altogether, or is so far wanting as to render the individual irresponsible. As has again and again been shown, the unconsciousness of right and wrong is one thing, and the powerlessness, through cerebral defect or disease, to do right is another thing. To confound them in an asylum would have the effect of transferring a considerable number of the inmates thence to the treadmill or the gallows." The judgment of Judge Somerville was entirely in accordance with this principle. It should be stated that Chief Justice Stone dissented in part, and expressed his own views separately.

Mr Bell concludes his paper by observing that "these two cases, the former a decision of the highest Appellate Court in the State of Alabama, and the latter by one of the judges of the Supreme Court of the District of Columbia, at the national capital, indicate the change which is going on on this side of the Atlantic in the judicial mind. I trust it will in the near future be universal in the American States, and help to lead the way to such legislation in the English Parliament as that contained in the law, proposed there in March, 1884, the work of an eminent English jurist, with the approval of the late Chief Justice Cockburn, setting at rest in English-speaking countries a question so full of interest to every citizen, and so pregnant with the rights and destiny of the insane."

It is to be hoped that such will be the case. It is notorious that, in many instances, the English judges commence their charge to the jury by laying down the law as to the test of moral responsibility in accordance with the dicta of the judges of 1843, while they are in the end compelled by the nature of the case to fly, very much against their will, in the face of their own ruling. Thus, the dignity of the law is lowered. In spite of the dilemma in which the Bench finds itself placed from time to time, there continues to be an obstinate persistence in the same doctrine, without any general desire or attempt to have the law altered. The American judges, although the English maxim has been adopted in the States, do not appear to hold themselves bound to charge juries in the same way as in England, and so avoid self-contradiction in the judgments they deliver in the Courts, when, in cases of murder, the plea of insanity is set up by the defence.—*British Medical Journal*, Nov. 3, 1888.

Correspondence.

On the Use of Restraint in the Care of the Insane.

By Alex. Robertson, M.D., F.F.P.S.G., Physician to the Royal Infirmary and City Parochial Asylum, Glasgow.

To the Editors of "The Journal of Mental Science."

Gentlemen,—The Journal for January of the present year contains a report of an important discussion "On the Use of Restraint in the Care of the Insane" at the Edinburgh meeting of the Association in last November. As I was unable to be present, I ask you to be so good as to permit me to express my views through

the medium of your columns on this very important subject. I learn from the report that it has been the occasion of a controversy in the "Times" between leading members of the profession in the south, but as I have not seen the articles on either side, my remarks can in no way be influenced by the opinions of any of the writers.

Many, like myself, will have learned with no small surprise that the use of mechanical personal restraint, to a somewhat considerable extent, is advocated by physicians in charge of leading asylums. Hitherto even intelligent laymen, when they have had occasion to refer to the evidences of progress in the nineteenth century, have in illustration pointed with pride to the non-restraint system of treatment in our asylums for the insane. Distinguished Continental and American physicians have studied it in operation in these institutions, and recorded their high appreciation of the results. Its beneficent influence has also extended to many of the asylums of other lands. While I write, the biennial report of the Alabama Insane Hospital has just been received. Dr. Bryce, the Physician-Superintendent, in referring to "the abolition of all mechanical restraint" some years ago, remarks: "Every year's experience since that notable event has impressed me more and more forcibly of its supreme wisdom and efficacy; our wards are as quiet under this system as those of any well-ordered private family." After many more remarks of a similar kind, he closes with a note of warning, "Let us see to it that we take no step backward."

Many of us can still recall the gratification felt on the presentation of the bust of Conolly by the late Baron Mundy, M.D., to the Association, and afterwards through its representatives to the Royal College of Physicians of London. That eminent physician, in his eulogy of Conolly on the occasion of its formal acceptance by the College, said, addressing the chair, "You have been enjoying for almost a quarter of a century the work of the great man who is no more, and still your neighbours, close to your shores, have yet, at the moment I address you, two thousand unfortunate beings tied in strait jackets . . . and the total number of the insane on the Continent confined in cells, fastened in beds, and strapped up in strait jackets amounted in 1867 to fifty thousand. It is for me as a foreigner a humiliation, and perhaps at the same time a proof of my professional courage that I denounce these facts before so high an authority as yourself, and on so solemn an occasion as this of to-day." The President of the College, the late Sir Thomas Watson, in the course of his reply, remarked: "His (Conolly's) name will go down to a remote posterity, and be reckoned among those of the greatest and most noble benefactors to a very suffering portion of the human race that our profession and our country have ever produced." Little did either of these eminent men then think that within twenty years of the time they spoke, physicians of eminence at the head of some of

our chief asylums would have advocated a return to the use of measures of restraint whose all but total abolition was the especial glory of Tuke at York and Conolly at Hanwell, and reflected honour on the land of their birth.

The report of the Edinburgh meeting certainly conveys the impression that the majority of the speakers approve of the use of restraint. But the practice of some of them scarcely bears out this theoretical expression of opinion. Thus Dr. Clouston applies restraint in surgical cases only, and where the suicidal disposition is exceptionally pronounced. Dr. Turnbull's practice is the same, but he distinctly states that he restricts the appliance in the suicidal cases to night. The form I infer to be always "locked gloves." Dr. Rorie only uses the "gloves" in "extreme cases," but he does not specify what these are. Now I have always understood that even Conolly fully allowed the use of mechanical restraint in surgical cases. I am inclined to think, too, that even though a medical superintendent orders a pair of locked gloves to the hands of a highly suicidal patient at night, the hands being otherwise free, in rare and extreme cases, *but only in such cases*, he may still be claimed among the supporters of non-restraint.* But whatever opinion is entertained on this point, there can be no doubt that the position of at least Drs. Yellowlees, Urquhart, and Johnston is very different. As the views expressed by Dr. Yellowlees were fully endorsed by the two other gentlemen, we turn to him for an exposition of his opinions. These were put very definitely before the meeting. He thinks that the use of mechanical restraint is required in four classes of cases. I quote his words:—"(1). *In cases where the suicidal impulse is intensely strong.* I have no hesitation whatever in putting gloves on these patients for their own safety and the protection of the attendants in charge of them. (2). In cases of extreme and exceptional violence. I think the use of gloves often wise in such cases. Once or twice I have used side-arm dresses, although not for many years. (3). In extremely destructive cases. (4). The helpless and incessantly restless patients, who day and night roll about the room," etc. For the last class he recommends the "protection bed." This, as I saw it many years since in an American asylum, is a deep and narrow box-bed, with a sparred lid or cover. The patient lies on a mattress in the bottom of it, and the lid, which is locked, prevents him from rising into the erect posture.

It seems to me that a question of this kind can only be determined by results. Comparison should be made between asylums

* That Dr. Robertson would not have been regarded as orthodox by Conolly is clear from the following:—"Even the stuffed gloves were found to possess so many of the disadvantages of restraint, that they were discontinued after a short trial. They were chiefly employed on the female side of the house; and the report of the nurses concerning the patients to whom they were applied, is that they are less combative and dangerous than they were before." See Dr. Conolly's "Treatment of the Insane without Mechanical Restraint."—[Eds.].

in which restraint is used to the extent advocated by Dr. Yellowlees and those where Conolly's principles are still in force—where there is a minimum of restraint. This can be best done by a candid statement of experience based on a long series of years. I shall do so myself, and at the same time invite Dr. Yellowlees or any other gentleman who may concur in his views to put his experience also on record. In order that the comparison may be as complete as possible, it seems advisable that the facts should be elicited by answers to a series of questions, as follows :—

Q.—What is the length of your experience ?

A.—Three years as assistant, upwards of thirty years as physician-superintendent.

Q.—How many patients are in your asylum ?

A.—On an average for the first 25 years, 203 ; for the last five years asylum only licensed for 125 ; always full, often two or three beyond the complement.

Q.—What is the average number of admissions ?

A.—For 21 years, between 1863 and 1883, the average number of admissions annually was 79 ; from 1884 to 1888 inclusive, 46. Besides, during each of the last twelve years 34 patients were on an average admitted on what are known as "certificates of emergency," and accommodated for a period not exceeding three days, when they were removed to other asylums, the parochial asylum being full. These cases being usually in the acute stage of their illness, add greatly to the responsibilities of the management.

Q.—What has been the average proportion of recoveries calculated on the admissions, say for the last ten years ?

A.—47·3 per cent.*

Q.—Is every kind of case admitted ?

A.—Yes ; there is no selection.

Q.—What was the weekly cost of maintenance in your asylum during the last financial year ?

A.—8s. $\frac{3}{8}$d. This includes repairs and charge for rent.

Q.—What is the proportion of day-attendants to patients in your asylum ?

A.—One to 15·8 patients.

Q.—What is your practice in the use of mechanical personal restraint ?

A.—No strait jacket, or "side dresses," or anything of that kind has ever been used in my whole experience. Two patients suffering from surgical diseases, one 29 and the other 4 years since, were fixed to their beds by sheets and bandages till these ailments were cured. In a surgical case at present one glove is in

* This does not correspond with the annual reports of the Board of Lunacy. The proportion stated in them is based on the admissions, *plus the emergency cases ;* my statement excludes them. These cases are only accommodated for convenience for, as mentioned, less than three days, and are not admissions in the ordinary sense of the word.

use. In a small number of highly suicidal cases I have ordered locked canvas gloves at night, the hands being otherwise free. How rarely they are prescribed will be seen from the following list for the three years ending 31st December, 1888, which has been prepared from the statements of the attendants, corroborated by my own recollection, as no record was made:—April, 1886, gloves one night; May, 1887, gloves one night; May, 1888, gloves two nights. Two were cases of attempted suicide, the third was strongly disposed to suicide.

Q.—What is your practice in respect of seclusion?

A.—It is seldom used. Five patients were secluded during 1888, the sum of all their seclusions being 31 hours. No one was secluded in 1887.

Q.—Do you use guards of any kind for the windows or fires?

A.—The only guards in use are two nursery ones, quite open at the top, and simply hooked on at the sides. One is over the fire in a parlour where there are many epileptics, the other in the parlour for the most violent cases. There is no guard of any kind over any of the windows. The windows are, of course, so fixed on the upper floors that they cannot be opened at the top or bottom above four inches.

Q.—How many, if any, homicides have occurred in your experience?

A.—None.

Q.—How many, if any, suicides have occurred in your experience?

A.—None.

Q.—How many important injuries to patients have occurred in the course of your experience, in struggles either with attendants or fellow-patients?

A.—In ten cases bones were broken, but all were simple fractures. No patient is known to have suffered permanent injury.

Q.—How many, if any, attendants have been injured in your experience?

A.—Two attendants have each had his shoulder dislocated, but it was easily reduced. These, and one or two temporarily stunning blows on the head, were by far the most serious occurrences. No one was ever permanently injured.

Q.—What was the value of the clothing of all kinds destroyed in your asylum last year?

A.—7s. 6d.

Q.—What was the value of the glass destroyed in your asylum last year?

A.—Not more than 1s.

Q.—What have been the usual entries of the Commissioners in their reports respecting the order and quietude of your asylum?

A.—Both have been stated to be satisfactory. There is, of course, occasionally some noise and excitement in the department for the acute cases.

These details have been obtained by careful examination of the books of the establishment in the hands of Mr. Laing, the Governor of the Asylum and Poorhouse, to whom I am indebted for the trouble he has taken iu this inquiry, as well as for his co-operation in the management, especially during late years. The results I believe to be creditable to the principle of non-restraint. I was trained in its practice by my late respected master and friend, Dr. Alex. Mackintosh, of Gartnavel Asylum, and I have not yet seen any reason to modify my high appreciation of its wisdom and value. However, we must wait till those who favour the more extended use of restraint tell us their results before determining the question. Meanwhile, any who are in doubt may refrain from arriving at a conclusion.

I may be asked, What are your methods of treatment? I answer, nothing special, simply careful individualization—studying and applying the indications of management and treatment in each case—work, outdoor exercise, careful dieting, amusements, and medicinal treatment. In reference to the last of these, I refuse to admit that when a patient is soothed by medicines fitted to allay the irritability of a brain in a state of disease, I am employing "chemical restraint," at least in the offensive sense attached to the expression by some, and especially by those who favour mechanical restraint.

I have only further to express my regret that in this communication I have been obliged to name gentlemen whom I count among my personal friends. But all personal considerations must be sunk in view of the importance of the question under consideration. Especially do I regret that I have been constrained to refer particularly to Dr. Yellowlees. It is simply because he initiated and took by far the most important part in the discussion at Edinburgh, and is at present the leader in Scotland of what I believe to be a distinctly retrograde movement. He would do well to remember when advocating the cause of restraint or about to order the application of the "side-arm dresses" or the use of the "protection bed," that there is a plate on the foundation-stone of Gartnavel Asylum bearing an inscription which declares that the asylum is erected on the principle of "Employing no Mechanical Personal Restraint in the Treatment of the Patients."

LAY REVOLT AGAINST MEDIÆVAL ALIENISM.

To the Editors of "The Journal of Mental Science."

Sirs,—In the history of the remarkable movement in which the alienism of the middle ages was swept away, graceful and well-deserved tributes of praise have been bestowed on the labours of Tuke, Pinel, and Esquirol, whose enlightened policy is contrasted—not always with a nice regard to chronology—with the fanaticism of theologians like De Lépine, and the bigotry of the judicial savage who wished that all the witches of Burgundy might be gathered into one place and destroyed.

One chapter only in this strange story remains unwritten—*the lay revolt against mediæval alienism.* Abundant material may be found in the first volume of Calmeil's "De la Folie," in "Le Monde Enchanté," by Balthasar Bekker, and above all in the "Cautio Criminalis, seu de processibus contra sagas" (1694). In this work Spée analyzes with great power, and ever and anon with an epigrammatic indignation worthy of Michelet, the whole judicial machinery of sorcery prosecutions.

I venture respectfully to suggest that in the history of modern alienism a place should be found for such quotations as these—

"Non intercedo justitiæ: non obsisto: nolo ut sint crimina impunita: sed id solum volo quod legifer noster Christus suo ore sancivit, non evellenda esse zizania si periculum sit ne forte cum iis et triticum evellatur" (p. 63).

Dealing with "the speculative theologians" who instigated the prosecutions, he says—

"Quid foris gereatur (*sic*), quis squalor carcerum sit, quod vinculorum pondus, quæ instrumenta torturarum, quæ lamenta pauperum, et similia, nullâ experientiâ didicerunt" (p. 65).

In the following passages Spée dramatises a scene in the torture-chamber; the victim is stretched on the rack, and is at length unconscious of the voice of the priestly questioner—

"Ecce, inquit sacerdos, nunc somno solvitur, ubi alia tractamus: cum id ageretur ut se reum diceret, tunc ad omnes quæstiones obdormiebat. Quid de maleficio dubitabimus? Non poterat eas pœnas nebulo perferre, nisi demon ei sensum sopivisset?" To which he adds, "Præclarum vero facinus ac sacerdote dignum!" (p. 172).

Again: "Age, stulta mulier et vesana; quid toties vis mori, cum semel possis? Sequere consilium et ante omnem pœnam dic te ream et morere!" (p. 397).

I remain your obedient Servant,

A. Wood Renton.

St. George's Club, Hanover Square, W.,
Sept. 11, 1888.

To the Editors of The Journal of Mental Science.

District Lunatic Asylum,
Sligo, 4th March, 1889.

Gentlemen,—Referring to your comments in the January number of the Journal anent the remarks in my report for the year 1886 as to the stimulants used in this asylum, I beg to direct your attention to the following extract, more particularly the last sentence thereof, taken from the "British Medical Journal" of the 5th January last:—

"Alcohol in Belper Workhouse.

"There seems to have of recent years been a considerable increase in the amount of alcohol consumed in the Belper Workhouse. The guardians having had their attention called to this, asked the medical officer for an explanation. This request called forth an amusing and spirited defence of the liberal prescription of alcoholic liquor to sick inmates. The medical officer declares that if there had not been this generous administration of intoxicants, the rates would have been reduced in two ways. There would have been a saving to the rates in the direct charge for the liquor used, and there would have been a saving by the premature removal of the poor people to 'that bourne from whence no traveller returns.' 'They would die, and, in the words of the immortal Mr. Scrooge, "materially reduce the surplus population."' The medical officer insisted that his position was 'unique in its impregnability.' He gives, as the Hon. F. Strutt remarked at the meeting of the guardians, no statistics. A few cases, however, are narrated in proof of the necessity for alcohol. One case was that of a man brought in insensible from exposure. It does not appear to have

occurred to the medical officer that there are other restoratives and restorative appliances besides alcohol. External heat, hot coffee or milk, or other liquid, aromatic spirit of ammonia, chloric ether, and compound cinnamon powder, have all been found useful in such conditions. Alcohol itself might be given in a medicinal mixture, or in such combinations as compound tincture of cardamoms, or simply in hot water. While we do not desire to question in the slightest the judiciousness of the prescriptions of intoxicants at Belper, and we are glad to note that the medical officer orders these remedies only to the sick, we cannot too strongly urge the utmost caution and deliberation in the therapeutic employment of beer, wine, and spirits in workhouses. There are so many abuses liable to arise where alcoholic drinks are freely ordered in institutions that, wherever possible, other medicinal preparations ought to be preferred if as suitable for the case. In some very large workhouses and infirmaries very little liquor is consumed, and as no deleterious effect has been observed from the treatment on the rate of mortality, the very sparing employment of alcoholic intoxicants given even as a medicine can be confidently commended to all engaged in the poor-law medical service."

Speaking from an experience extending over fifteen years, during which period I have been connected with three different asylums, and from an antecedent experience as medical officer to a workhouse, I cannot help having very strong suspicions that in any institution in which stimulants are distributed with a lavish hand a large proportion does not find its way to those for whom it is intended.

I hope you will be able to insert this letter in the April number of the Journal.

Faithfully yours,
JOSEPH PETIT,
Resident Medical Superintendent.

Obituary.

ALEXANDER MACKINTOSH, M.D. ST. AND., L.F.P.S. GLASG.

The Medico-Psychological Association has lost one of its earliest and oldest members by the death of Dr. Alexander Mackintosh, Honorary Consulting Physician to the Glasgow Royal Asylum, which took place at Glasgow on 20th January last. He was born, and for the most part educated, in Glasgow. After a period of service in the Army, including, we believe, the superintendence of a colonial military hospital, he was appointed Lay Superintendent of the Dundee Royal Asylum in 1830, and in 1833 became Surgeon-Superintendent of that Institution. This office he filled "to the entire and unqualified satisfaction of the directors" until he was appointed in 1849 Physician-Superintendent of the Glasgow Royal Asylum. The duties of this office he discharged with equal success and acceptance until failing health led to his resignation in 1874, when he was created Honorary Consulting Physician to the Institution he had so long and so ably superintended, and in acknowledgment of his faithful and invaluable services was awarded a pension equal to two-thirds of his salary.

Dr. Mackintosh very early adopted enlightened and humane views as to the treatment of the insane. He advocated and practised the so-called "non-restraint system." He was among the first to recognize the great value of manual labour as an antidote to excitement or an outlet for it, and the Dundee Asylum under his energetic management was remarkable for the amount and the variety of the industrial work done by the patients.

His administration at Gartnavel was hampered by the debt which so long burdened the institution, but his conduct of the asylum was such as to secure at once the entire approval of the directors and the full confidence of the public.

A high sense of duty was perhaps the prominent feature of his character, and he expected a like feeling in others. Hence in his asylum management he was

a rigid disciplinarian, and demanded punctual and minute attention to all details of treatment. While kind and indulgent to the patients, he had no toleration for carelessness or neglect in the servants of the institution. He expected from his staff a devotion akin to his own, and he appreciated upright and efficient service as those only can who strive to render it themselves.

He died in his 84th year, having really spent his life in the cause of the insane. Few men have left a record of such long and faithful service.

WILLIAM HENRY OCTAVIUS SANKEY, M.D.Lond., F.R.C.P.

We regret to have to chronicle the death of Dr. Sankey, of Boreatton Park, Shrewsbury. He was a student at St. Bartholomew's, and after practising at Margate, became resident medical officer at the London Fever Hospital. In 1854 he was appointed medical superintendent of the female side of the Hanwell Asylum, where he worked assiduously for ten years. His health was not good and he preferred having a private asylum, at Sandywell Park, near Cheltenham. This did not prevent him coming up to London and lecturing in the summer at University College, on Mental Diseases. In 1882 he removed to Boreatton Park, and was, we believe, successful in his private asylum there. Two years later he issued a second edition of his Lectures on Mental Diseases, a work favourably reviewed in this Journal. He was President of the Medico-Psychological Association in 1868. As recently as 1887 he was President of the Shropshire and Mid-Wales Branch of the British Medical Association.

The intelligence of his death reaches us as the last sheet is passing through the press, and the space at our command does not admit of a more extended notice. We understand he had been ailing for some time with hepatic symptoms of a somewhat obscure nature, but the announcement of his death will come to many as a surprise. He died on the 8th of March, of pneumonia, after a few days' illness.

MEDICO-PSYCHOLOGICAL ASSOCIATION.*

M.P.C. Examination.

ENGLAND.

Bethlem Hospital, *December* 20 *and* 21, 1889.

Examiners:

Dr. Fielding Blandford and Dr. Hack Tuke (in the absence of Dr. Rayner).

The following candidates received the Certificate of Efficiency in Psychological Medicine:—

J. Chambers, M.B., M.Ch., Assistant Medical Officer, County Asylum, Garlands, Carlisle.

J. C. Mackenzie, M.B., C.M.Edin., Assistant Medical Officer, County Asylum, Morpeth.

N. Raw, M.B., B.S., Assistant Medical Officer, Borough Asylum, Portsmouth.

Questions:

I.—What treatment should you employ to procure sleep in: 1. Acute Delirious Mania? 2. Acute Melancholia? 3. Acute Mania? 4. Simple Melancholia? 5. The Acute Stage of General Paralysis?

II.—What are the post-mortem appearances in the brain of patients dying: *a*. In an attack of Acute Insanity? *b*. After Chronic Insanity? *c*. After General Paralysis?

* The next Examination, and also one for Honours (Gaskell Prize) will be held at Bethlem Hospital in July, 1889. For particulars apply to Dr. Savage, 3, Henrietta Street, Cavendish Square, W.

III.—What are the chief points to be noted in the diagnosis of General Paralysis? What other disorders may simulate it?

IV.—What is the connection between Insanity and Epilepsy? How would the presence of the latter affect the diagnosis, prognosis, and treatment of the former?

V.—What is the duty of medical men as to recommending or discountenancing the marriage of a person who has had symptoms of insanity, or in whose family insanity exists?

VI.—When consulted about patients who have recently become insane, for which cases should you recommend an asylum and for which treatment in a private house?

SCOTLAND.*

ROYAL EDINBURGH ASYLUM, 17th *December*, 1888.

Examiners:

DR. YELLOWLEES and DR. RORIE.

Assessors:

DR. CLOUSTON and DR. REID.

The following candidates passed the Examination:—

JOHN ANDERSON, M.B., C.M., Assistant Physician, Royal Asylum, Aberdeen.

JAMES CAMERON, M.B., C.M., Extra Assistant Physician, Royal Edinburgh Asylum.

EDWARD W. EZARD, M.B., B.Sc., Assistant Physician, Royal Asylum, Edinburgh.

FREDERICK KEYT, M.B., C.M., Aberdeen.

Questions:

I.—Describe the different varieties of stupor, giving their characteristics, prognosis, and treatment.

II.—Describe fully a typical case of general paralysis, including causation, progress, and *post-mortem* appearances.

III.—What other conditions resemble general paralysis, and how are they to be distinguished from it?

IV.—Describe an attack of acute mania. What is the treatment required at the different stages of the illness, and what are the dangers to be chiefly guarded against?

V.—State very fully the precautions needful in the care of a suicidal patient in his own house.

VI.—What are the forms of alcoholic insanity and the chief features of each?

IRELAND.†

DUBLIN, *January* 31, 1889.

Examiners:

DR. CONOLLY NORMAN and DR. RINGROSE ATKINS.

Names of candidates who passed the Examination:—

JAMES GAUSSEN MACNEECE, L.K.Q.C.P., L.R.C.S.I., Surgeon, Army Medical Department.

R. LOCKHART S. DONALDSON, M.B., M.Ch., University of Dublin, Assistant Resident Medical Officer, Monaghan District Asylum.

Questions:

I.—Give some of the most important classifications of insanity which have been put forward, and state, with your reasons, which you consider the soundest and most practically useful.

II.—Describe in detail how you would conduct the clinical examination of an

* For particulars of the next Examination apply to Dr. Urquhart, The Murray Royal Asylum, Perth.

† For particulars of the next Examination apply to Dr. Conolly Norman, Richmond Asylum, Dublin.

insane patient, in order to determine the possible causation, and the probable outcome of the case, physically and mentally.

III.—Mention the different clinical groups of "States of Mental Depression," and sketch briefly the prominent distinguishing features of each.

IV.—What form of Mental Disease is the insanity occurring at the period of adolescence, likely to eventuate in? Describe its characteristics as regards its symptoms, course, and prognosis.

V.—An insane patient has been refusing food—What indications would guide you in forming an opinion that the time had arrived when artificial feeding should be had recourse to?

VI.—Mention some of the Hypnotics more recently introduced in the treatment of the insane; state the advantages or disadvantages of each; their doses, mode of administration, and the indications which call for their exhibition.

VII.—Discuss the following points connected with General Paralysis of the insane:—(*a*) general diagnosis; (*b*) importance of early diagnosis in medico-legal aspect; (*c*) proposed clinical division into stages; (*d*) varieties of mental symptoms.

VIII.—Sketch a case of "Circular Insanity." What is the prognosis in such a case?

IX.—Define the following terms:—delusion, hallucination, illusion, imperative conception (or concept).

X.—You are called on to give an opinion as to testamentary capacity in a person of advanced age. What indications would guide you in forming the opinion that senile insanity existed?

XI.—You examine a prisoner committed for an act of violence. Mention the circumstances which would induce you to believe that the person was—(*a*) feigning insanity; (*b*) had acted under insane impulse; (*c*) suffered from transitory insanity; or (*d*) from moral insanity.

XII.—What is durhœmatoma? In what affections is the condition most commonly found, and what are the theories as to its essential nature?

UNIVERSITY OF SYDNEY.

[We are indebted to Dr. Norton Manning for the following, which it affords us much pleasure to insert.—Eds.]

Examination in Psychological Medicine,

Wednesday, December 12, 1888.

Questions:

I.—State briefly the method you would adopt in examining a patient supposed to be insane. Describe the legal processes necessary for the admission of a patient into a Hospital for the Insane or licensed house. Mention the conditions which render an insane person "a proper person to be taken charge of and detained under care and treatment." Criticize and correct the accompanying faulty certificate.

II.—Describe the symptoms of delirium tremens. State the treatment necessary, and mention the prognosis and the different modes in which an attack of delirium tremens may terminate.

III.—Give the chief diagnostic points, bodily and mental, in a case of general paralysis of the insane, and describe fully the pathology of this affection and of syphilitic arteritis.

IV.—Give a classification of insanity, and mention briefly the principles on which it is based.

V.—Mention the varieties of melancholia or mental depression. Describe the symptoms—physical, sensory, and mental—and the course and treatment of—1st,

simple; and 2nd, active, excited, or resistive melancholia. Mention the forms of insanity in which suicide is most to be apprehended.

VI.—Define shortly the terms "mental exaltation," "insane delusion," "masked or larvated epilepsy," and "genetous idiocy."

ASYLUM STATISTICS.

The attention of the Medical Superintendents of Asylums is drawn to the possible effect of the new County Councils in changing the period of the Statistical Year as given in the annual reports, seeing that the financial year will in future end in March. We hope that every effort will be made to continue the present plan of making the *statistical* year end with Dec. 31. Any change would tend to lessen the value of the tables. Uniformity both for the purpose of comparison of past and future tables, and the returns of different asylums, in future is most desirable.—[EDS.]

Appointments.

ALEXANDER, J. W., L.R.C.P., L.R.C.S.Edin., appointed Junior Medical Officer to the County Asylum, Rainhill.

BIRT, A., M.B., C.M.Ed., appointed Second Assistant Medical Officer to the Durham County Asylum.

CALDECOTT, CHAS., M.B., B.S.Lond., appointed Junior Assistant Medical Officer to the Holloway Sanatorium for the Insane.

CALLCOTT, J. T., M.D., appointed Medical Superintendent of the Newcastle-on-Tyne Borough Asylum.

CROOK, H. E., M.B., B.S.Lond., M.R.C.S., L.R.C.P., appointed Resident Medical Attendant to the Eastern Counties Asylum for Idiots, Colchester.

FINNY, WM. E. St.L., M.B., M.Ch.Roy.Univ. Ireland, appointed Third Assistant Medical Officer to the Kent County Asylum, Barming Heath.

FINUCANE, M., M.R.C.S., appointed Junior Assistant Medical Officer to the Hants County Asylum.

GREENE, A., L.R.C.S.I., L.R.C.P.Ed., appointed Consulting and Visiting Physician to the Ennis District Lunatic Asylum.

MCDOWALL, T. W., Northumberland County Asylum, Morpeth, has been appointed Lecturer on Psychological Medicine at the University of Durham College of Medicine, Newcastle-on-Tyne.

MAIR, L. W.D., M.B.Lond., L.R.C.P., M.R.C.S., appointed Assistant Medical Officer to the Coppice Lunatic Asylum, Nottingham.

MOYNAN, W. A., M.D., M.Ch., appointed Medical Superintendent of Wyke House Asylum, Isleworth.

POPE, P., M.R.C.S., L.R.C.P., appointed Junior Assistant Medical Officer to the State Criminal Lunatic Asylum, Broadmoor.

RIDLEY, J. B., M.B., C.M.Ed., appointed Resident Assistant Medical Officer to the Metropolitan Asylums Board Schools for Idiot Children, Darenth, Kent.

SMITH, R. G., M.A., B.Sc., M.R.C.S., appointed Assistant Medical Officer to the Lancashire County Asylum.

TANNER, C. P., M.R.C.S.Eng., L.R.C.P.Lond., appointed Third Assistant Medical Officer to the Worcester County and City Lunatic Asylum.

TURNER, J. J. C., Secretary of the Eastern Counties Asylum for Idiots, Colchester, has been appointed, with his wife, Superintendent and Matron of that Institution. He will continue to hold the office of Secretary. The late Superintendent and Matron, Mr. and Mrs. Edward Williams, have been appointed Master and Matron of the Holborn Union-house.

WIGLESWORTH, Dr., appointed Lecturer on Mental Diseases in University College, Liverpool.

WILSON, R. A., M.B., C.M.Edin., appointed Assistant Medical Officer to the Rubery Hill Asylum, Birmingham.

THE JOURNAL OF MENTAL SCIENCE.

[*Published by Authority of the Medico-Psychological Association of Great Britain and Ireland.*]

No. 150. NEW SERIES, No. 114. JULY, 1889. VOL. XXXV.

PART 1.—ORIGINAL ARTICLES.

Address in Psychological Medicine, delivered at the Intercolonial Medical Congress in Melbourne on January 11, 1888. By F. N. MANNING, M.D., Inspector-General of the Insane in New South Wales, and Lecturer on Psychological Medicine in the University of Sydney.*

In taking this chair I have first to acknowledge the courtesy and consideration which induced the Council of the Congress to select as the President of this section the senior officer of the Lunacy Department of the mother colony, and next—it being my good fortune to occupy this position—to express my personal gratification at presiding over the first session of the important section of psychological medicine.

The choice of a subject on which to address you required some thought and consideration. I could scarcely hope to say anything very new or very interesting on the more abstract and scientific questions pertaining to our specialty, and remembering that this is our 100th birthday, it occurred to me that I might with interest to you, and possibly with interest and advantage to those who may come after us, review our present position in regard to lunacy matters in Australia; set up, in fact, a sort of milestone on which to record our position and progress; and then, if time permits, indicate some of the steps which it behoves us to take on our path onward.

I shall trouble you as little as possible with statistical details, beyond what are necessary to bring out and make clear the more salient and important facts, and shall relegate to an appendix various tables and returns, which are of considerable interest, and for the means of compiling which I

* In the last number of this Journal we made some extracts from this Address, but it is as a whole so valuable a production that we have decided to print it *in extenso.*—[EDS. "J. M. S."]

am indebted to my *confrères* and co-workers—the heads of the Lunacy Departments in the various Australasian colonies. The returns from New Zealand are given separately. It is much to be regretted that the statistics from Western Australia are so imperfect as to be useless, except on one or two main points; but I felt that I could not trouble Dr. Barnett for more details after his somewhat plaintive statement in reply to my second letter of inquiry, that his "asylum work was merely an item of his general duties, and that he had no assistant."

The first point I shall notice is the proportion of insane to population:—

On Dec. 31, 1887 (and I may mention here that all the statistics I have collected go to the close of 1887), the population of the Australian colonies was 2,951,590, and the number of insane 8,435. There was, therefore, 1 insane person in every 349, or 2·86 per 1,000, the proportion of insane men being 1 in 330, and that of women 1 in 377.*

There was considerable difference in the proportion in the different colonies,† Victoria heading the list with 1 insane person in every 294, and Queensland and South Australia closing it with 1 in 419 and 1 in 431 respectively. The proportion in New Zealand was 1 in 380. The reason why lunacy is more prevalent in Victoria than in the other colonies I must leave for your discussion, merely suggesting that the returns seem to point to a somewhat over stringent registration—patients on leave of absence being retained on the books for long periods. In the case of Queensland there has been hardly time for the full accumulation of chronic cases—a process which takes some years.

How does the proportion of insane in Australia compare with that in Great Britain and Ireland? On Dec. 31, 1887, the proportion in the mother country was 1 in 342, or 2·92 per 1,000; the range being from 1 in 316 in Ireland to 1 in 346 in England,‡ so that at present the burden of insanity in Australia is somewhat less than in the United Kingdom.§

Is insanity in Australia increasing in proportion to the general population? I must answer this question in the

* Table I.

† Victoria . . 1 in 294 | New Zealand . . 1 in 380
West Australia . 1 in 351 | Tasmania . . 1 in 399
New S. Wales . 1 in 369 | Queensland . . 1 in 419
S. Australia . . . 1 in 431

‡ Table II.

§ One in 349 in Australia, as against one in 342 in Great Britain and Ireland.

affirmative, and add that the increase has during the last 10 years been only a slight one, and would appear to be due to the accumulation of chronic cases, and not to any proportional increase in the rate of "occurring insanity." On Dec. 31, 1877, the proportion of insane to population was 1 in 356, or 2·80 per 1,000, against 1 in 349, or 2·86 per 1,000 ten years later, by no means a large increase, and mainly in the younger colonies. In the older colonies there was even some decrease. In Tasmania the proportion decreased from 1 in 317 in 1877 to 1 in 399 in 1887. In New South Wales there was a slight decrease. The proportion in Victoria was practically unchanged. South and West Australia and Queensland showed an increase—greatest in the latter colony.*

The admissions in proportion to the population, which show the ratio of "occurring insanity," were in 1878 1 in 1,550, and ten years later, 1887, had dropped to 1 in 1,738, the average for the ten years being 1 in 1,690.†

The nationality of the insane at present under care is of interest now, and will be of equal, if not of greater, interest to those who may examine our statistics some years hence. These statistics are not as exact as they might be, owing to imperfect returns from Victoria and Tasmania, in which the nationality of a considerable number is returned as "unknown," but they show several important facts, the chief among them being that only 23·12 per cent. of the insane now under care were born in Australia, and that the larger proportion of our patients, therefore, are of other than Australian nationality. Upwards of 26 per cent. are from Ireland, 23 per cent. from England, 6 per cent. from Scotland, 2 per cent. from Germany, and 2 per cent. from China, whilst under the heading of "other countries and unknown" nearly 14½ per cent. are tabulated. Of these about 5 per cent. come from countries other than those already specified, and include stray specimens of nearly every race and nationality. Those tabulated as "unknown" in the Victorian and the Tasmanian statistics are evidently of foreign as opposed to Australian nationality, and by far the larger proportion should be credited to England, Scotland, and Ireland, and go to swell the already large percentages from these countries.‡

The proportion of patients of Australian nationality is, as might be expected, much greater in the older than in the younger colonies, and ranges from 12 per cent. in Queensland

* Table I. † Table III. ‡ Table IV.

to 32 per cent. in Tasmania. No detailed census has been taken since the year 1881, and it is not possible, therefore, to fix accurately the relative proportion of the insane with regard to nationality, but there can be no doubt that the proportion of insanity is, throughout Australia (as it was in New South Wales in 1881), much greater among the foreign than among the native born. At that time in New South Wales the proportion of insane per 1,000, among persons of British nationality, was 8·03, and among foreigners 6·87, whilst among Australians it was only 1·22 per 1,000.

The comparatively small proportion of insanity among Australians is partly to be accounted for by the fact that fully one-third of these are children, whilst insanity is mainly a disease of middle life and old age, but there are some reasons, which I have not time to detail, which lead to the pleasant conclusion that Australians are less subject to insanity than people of other races living in Australia.

Turning now to the question of the recovery and death rate of insane persons under treatment and care, it is satisfactory to find that, with all the imperfections of Australian asylums, and the difficulties with regard to management which beset us, but from which the medical officers in English asylums are happily free, our recovery and death rate compare not unfavourably with those in asylums in the mother country. Taking the decennial period from 1878 to 1887 (and statistics on these points are apt to be misleading unless they include quinquennial or decennial periods), the recovery rate in Australian asylums was 42·09 per cent., whilst in addition 6·97 per cent. were discharged as relieved, as compared with a recovery rate of 40·04 per cent. in English asylums for the corresponding ten years. The recovery rate in Scotch and Irish asylums averaged a little below 40 per cent. for the same period.

It should be noted, however, that whilst the statistics of Australian asylums include idiots—a very incurable class—these are eliminated from the English statistics, and the Australian returns are therefore even better than they would at first sight appear.

The death rate in Australian asylums for the decennial period above mentioned was 7·09 per cent., whilst in England it was 9·58 and in Scotland 8·50. The death rate in the various colonies was as follows:—Queensland, 5·82; New South Wales, 6·72; Victoria, 7·11; Tasmania, 8·00; and South Australia, 9·00. The New Zealand death rate was

5·94.* The returns from Western Australia are incomplete.

The small death rate in the young colonies of Queensland and New Zealand is interesting in connection with the rapid increase of insanity in these colonies, and the difference between the Australian and the English rate goes far to account for the somewhat rapid growth of insanity in all the Australian colonies as compared with the mother country up to very recent years. The warmth and equability of our climate, which render our patients much less liable to pneumonia and other chest affections than the insane in Great Britain, have, I think, more to do with the low death rate than any other causes, and it is interesting to observe that, with one exception, the warmer and more equable the climate, the lower the asylum mortality.

With regard to the classification of the insane, it appears that of the total number 9·35 per cent. are suffering from undeveloped intellect, are, in fact, imbecile or idiotic; 3·07 per cent. are under criminal disability; nearly 1 per cent. are still at the charge of the Imperial Treasury—the relics of a by-gone *régime;* and 86·59 per cent. belong to the ordinary class of the insane, who have possessed intellect and lost it, and who are under no criminal ban.† Only 1·188 of the total number of 8,435, or 14·08 per cent., are deemed curable; so that the large mass of our asylum population consists of chronic and incurable patients.† The differences in the proportion of the various classes in the different colonies as shown in Table VI. are interesting, but I have not time to discuss them or their probable causes.

I should have been glad to discuss the question, "Does insanity, as seen in Australia, differ in its forms and types from insanity in other countries?" but on this point must content myself with placing before you one or two facts relative to general paralysis, a most interesting and typical form of insanity, which has only been fully known and recognized in modern times, and which is undoubtedly increasing in frequency.

This peculiar affection is at present much less common in Australia than in England. The proportion of general paralytics admitted to Australian asylums in 1887 was 1·8 per cent. of the total number admitted, whereas the proportion admitted into English asylums for the same year was 8·6 per cent.‡

* Table V. † Table VI. ‡ Table VII.

Again, the proportion of general paralytics admitted to the New South Wales asylums for the quinquennial period 1883 to 1887 was 3·4 per cent., whilst the proportion admitted to English asylums for the same period was 8·4 per cent.* This disease already appears more common in the older than in the younger colonies, and it will be interesting to observe if it increases in all.

I may note in passing that as yet epilepsy is decidedly less common in Australian than in English asylums.†

Time will not permit of any lengthened notice of the lunacy laws of the Australian colonies, but this is a subject which I cannot pass over altogether in silence.

Each colony has its own Lunacy Acts, passed at various dates, commencing with that for Tasmania in 1858, and ending with that for Queensland in 1884. The foundation of all of them is English law and precedent. The superstructure varies with colonial needs and expediency. The scattered population, the paucity of qualified medical practitioners, the enormous distances, and various other matters have had to be taken into account, and legislation adapted thereto.

In all the colonies (except in the case of indigent patients committed by Justices in Tasmania and South Australia, where one medical certificate is accepted) two medical certificates are required before patients can be admitted to hospital. In all patients can be admitted at the "request" of relatives or friends if such a request is accompanied by two medical certificates. In all there are stringent provisions that the persons signing the "order," "request," and certificates shall be independent and unassociated persons. In all there are provisions for the rejection of imperfect certificates, and in all, except Tasmania and South Australia, where there are special arrangements, the medical officer of the hospital must give a separate and independent certificate of insanity within a brief period after admission, or the patient cannot be detained. There are also in all abundant provisions for inspection by inspectors, commissioners, official visitors, or other authorized officials, and the interests of the patients are as fully guarded with regard to discharge as to admission.

On the whole the lunacy laws of the Australian colonies appear to be satisfactory, sufficient, and well abreast of the time. They are in no way behind, and in some respects

* Table VIII. † Table VII.

ahead of the legislation in Great Britain, the United States, Canada, and the principal European countries. In the provision of reception houses in New South Wales and Queensland, and of lunacy wards in public hospitals in Victoria, for the treatment of insanity in its early stages, the Statutes are decidedly in advance of those of Great Britain.

During the year 1887 the Master in Lunacy in New South Wales applied to the English Courts for the payment to him of money belonging to a patient in one of the hospitals of the colony, and in delivering judgment* Lord Justice Cotton thus expressed himself: "We have been referred to the Lunacy Act of New South Wales, and undoubtedly that Act contains provisions which make it practically impossible that anyone should be in an asylum without sufficient reason;" whilst Lord Justice Bowen said: "I desire most emphatically to add my voice to what has been said by the Lord Justice as to the provisions of the Colonial Legislature being above all comment and criticism as regards these insane patients. We have the most ample confidence not only in the legislation, but in the officers who administer the law, and the patient is surrounded by all the protection and safeguards that could reasonably be invented for the purpose of taking care of herself and her property."

What is here said of the lunacy laws of New South Wales might, I believe, be said with but little reservation of the lunacy laws of all the Australian colonies. The newer Acts are—as they should be—the better. Our younger sister, Queensland, has been able to see the few weak points in the legislation of the older colonies, and avoid them.

Whilst I am on this subject I may mention that during the last three or four years there has been in England an outcry for the reform of the Lunacy Acts, and so-called reformers have advocated three radical changes:—

1st. That no patient shall be sent to an hospital or licensed house unless examined and committed thereto by a judge or magistrate.

2nd. That all such committals shall be for a definite time —say one or two years, and shall be renewed if necessary.

3rd. That all medical certificates shall be signed by specially appointed medical practitioners or experts.

I think there is reason for the strongest objections to each and all of these proposals. It is clear that they would widen the breach between the care and treatment of diseases of the

* Law Report, Chancery Div., Part 12, 1887.

brain and diseases of other organs, which for years all the teaching, all the endeavours, and all the wisdom of modern science has been endeavouring to close and annul, and did time permit I should, I think, be able to show that such legislation would be a retrograde step, and be able to give good and sufficient reasons for its rejection.

As yet there is no special legislative provision for idiots and imbeciles in any of the Australian colonies, and the English "Idiot Act of 1886," entitled "An Act for giving facilities for the care, education, and training of idiots and imbeciles," might with advantage be adopted.

In Great Britain there are various methods of providing for the insane. Besides State institutions for criminals and for the insane of the military and naval services, there are county, district, and parochial asylums, as well as lunatic wards in poorhouses, under the management and control of local authorities, and the inspection of Government officials; lunatic hospitals under trustees, in which the excess payments of the well-to-do are used for the support of those less favoured of fortune; private asylums which receive patients at rates suited to almost all classes of paying patients; a system of payment to relatives towards the support of the insane poor; and in Scotland and other places "boarding-out" with strangers who have no connection with, or interest in the patients except the monetary one.

In Australia, with the exception of private asylums in New South Wales and New Zealand, the whole of the institutions for the insane are under State control, supported by funds provided by Parliamentary vote, and managed directly by the Government, and there is no established system of payment to relatives or "boarding-out."

In Great Britain, with an elaborate system of local government, the result of long experience, the local or district provision for the insane leaves little or nothing to be desired. In America (where local government is less completely organized), whilst the State asylums are admirable, the institutions under local or municipal control are for the most part dismal failures. The fifth report of the State Committee on Lunacy of the Commonwealth of Pennsylvania, published only a year or so ago, contains the following statement:—"The entire arrangement and government of many of the county institutions are such that the insane poor cannot be otherwise than neglected and cruelly wronged, and the treatment of this unfortunate class in poorhouses has been simply that of continued neglect." The details

given in this and other reports, from Pennsylvania, New York, and other States, are simply horrible.

I see nothing in the present state of local government in Australia which leads me to think that municipal or county authorities would be any better guardians for the insane than they are in America, and I think our insane fortunate that they are, so far, wards of the State. It would be well, however, if our State institutions were supplemented by others, like the lunatic hospitals at home, managed by trustees for the good and profit of the patients only, and bearing the same relation to the sick in mind as our general hospitals do to the sick in body.

As yet private benevolence has not stepped in to assist in the maintenance and care of the insane in Australia. We have no institutions like the Maclean Hospital in Massachusetts; the Pennsylvanian Hospital for the Insane at Philadelphia; the Hospital at Coton Hill, near Stafford; Barnwood House, near Gloucester; the Friends' Retreat at York; St. Andrew's Hospital, Northampton; the Holloway Sanatorium at Virginia Water; Murray's Asylum at Perth; the Crichton Institution at Dumfries; or the several Royal Asylums at Edinburgh, Montrose, Glasgow, and other cities. I mention these as types of many others in Great Britain and America, all of them magnificent institutions, built or endowed by private beneficence, for the care of patients who are not able to meet the charges for maintenance. In the small New England State of New Hampshire, upwards of £54,000 has been bequeathed for the benefit of the patients in the State Asylums—and the interest is now expended by the trustees for their benefit. This is by no means an exceptional instance in America, whilst, so far as I am aware, not one penny of private means from subscriptions, donations, or legacies, is available for the maintenance of insane persons in this great continent.

I trust that such an opprobrium will not long continue, and that, ere long, the sick in mind may share with the sick in body in the contributions of the benevolent. I know no way in which the surplus wealth of the rich can be better expended. I know no way in which more real solace and comfort can be afforded, and a truer charity exercised, than placing in a position of comfort the minister of religion, the physician, the artist, or the teacher, who would, except for such aid and assistance—owing to the loss of all means through a cruel malady—be left to the charity of the State, and have to herd with the vagrant and the pauper, though

still refined—still cultured—still with the instincts of a gentleman.

Again, though I am no advocate for private asylums, I think these institutions—for the richer classes—have a useful place in an asylum system, and can make provision for those who cannot be so adequately cared for under the, perhaps, necessary restrictions as to outlay in Government institutions.

Until within the last few years all the hospitals for the insane in Australia received all classes, and were in no way specialized, but with the growth of population the wisdom, nay, the necessity, of providing separate accommodation for criminals, for idiots, and imbeciles, and for the large class of chronic insane, has been recognized.

New South Wales, Victoria, and Tasmania have already, practically, distinct institutions for criminals. In New South Wales there is a separate hospital for idiots. In Victoria and Tasmania these classes are placed in cottages—separate from, though in connection with, the hospitals—and the Victorian Government, to its great honour, has lately made a distinct step in advance, and commenced a system of special education and training, after English and American models, for this feeble-minded class.

The much-debated subject of the separation of the acute and chronic insane by placing them in different institutions, has found a practical settlement. At Parramatta in New South Wales, Sunbury in Victoria, and Ipswich in Queensland, buildings erected for other purposes, and unsuited for the more demonstrative classes of the insane, have been set apart for chronic cases, and there can be little doubt but that this arrangement will be more fully carried out in the future, as tending to economy and more systematic classification.

The system under which all patients who are brought to our hospitals in all the Australian colonies are admitted, whether there is room or not, is one that, so far as I am aware, obtains in no other country—certainly in no other English speaking community. In Great Britain, in the United States, in Canada, a standard of accommodation is fixed, and no patient is admitted in excess of this. In Great Britain the numbers in excess of the accommodation in local asylums are accommodated temporarily in the asylums of other districts, in licensed houses or poorhouses. In Canada and the United States the temporary accommodation provided is in poorhouses, or other receptacles, and the patients must await their turn for admission, should the State asylums be full. Our system has one advantage—it gives us our patients

in an early, and, in many cases, curable stage of their malady; but it has disadvantages which outweigh this. It does not allow us to do our best for them when we have got them. Our accommodation (I speak from twenty years' experience) is seldom or never in advance of our needs. It is often grievously behind them; and the overcrowding consequent on this is subversive of all order, cramps, if it does not paralyze, the best efforts of our medical officers, and is too often fatal to the mental health of our patients.

If this system of admission is to be continued, it should be in connection with one for providing more speedily, and under less restrictions than at present, ample and suitable accommodation—and this, gentlemen, I fear, will never be until the management of our asylums is placed in the hands of persons (a Commission it might be—these are the days of Commissions) who will have more weight, and be more listened to by the Government than any single head of a department—even if an embodied importunity—can hope to be. I think I have not been remiss in urging the claims of the insane in New South Wales, but the accommodation in that colony is still far short of what is necessary to give 600 cubic feet per patient—the least space necessary for health, quiet, and efficient administration; and I gather that the same condition of things exists in other colonies.

Some of the buildings in use for housing the insane in Australia are strangely different to what they should be, and require improving off the face of the continent. There are some in Tasmania, in Victoria, and in New South Wales which are heart-breaking to those having charge of them, but it is to be hoped that these will soon be things of the past, and the fine piles at Kew in Victoria, at Parkside in South Australia, at Callan Park in New South Wales, at Toowoomba in Queensland, and at Seacliffe near Duneden in New Zealand, are evidences of a large and wise liberality, and an earnest of advancing civilization.

The number of medical officers to patients in Australian asylums is at present far below what it should be. In the United States it is 1 to every 160; in Ontario, the foremost State of the Dominion of Canada, 1 to 209; in Great Britain and Ireland, 1 to 250; in Australia, 1 to 325.

I understand that arrangements have been made in South Australia to commence this year with one additional medical officer, and the New South Wales Parliament has provided means for the employment of two in addition to the present medical staff.

Under disadvantages, some of which I have indicated, we may, I think, be proud that non-restraint in the treatment of our patients is our rule—restraint the occasional exception. From the returns furnished to me from all the Australian and New Zealand asylums it appears that restraint is on an average used only in 1 out of 300 or 400 cases, and then chiefly for surgical reasons or to guard against suicide.

Thus much as to our present position. And now turning from the present to the future, what are to be our further onward steps in the care and treatment of the insane and in the advancement of Psychological Medicine? To the amateur alienist—at all events in Victoria—the great desideratum would seem to be the replacing of what are somewhat unfairly called barrack buildings by cottages, and if one is to trust newspaper reports, the Government of Victoria is about to take the astounding step of housing some 1,500 insane patients in cottages, and placing this "City of the Simple" at some distance from the metropolis.

The objections to this scheme have been so ably set forth by Dr. Barker, an officer of the Victorian Lunacy Department, that it is perhaps not necessary for me to go fully into the subject. Something, however, I must say on this point.

Whilst I am very decidedly of opinion that cottages should form a part of every Hospital for the Insane, I am also of opinion that they cannot be very largely used, and that for three-fourths, if not nine-tenths, of the insane under hospital care, cottages will be found altogether unsuitable. They are costly to build, costly to work, difficult to administer and supervise, and add little or nothing to the comfort and well-being of the patients placed in them. The truth is that the large majority of patients when fit for cottages are fit for discharge. For convalescents, for certain of the chronic insane—especially the steady workers who do so much to carry on the farm and garden operations of all hospitals—cottages afford a comfortable and suitable home. For the sick they are unsuitable as withdrawing them too much from efficient medical supervision; for a great majority of acute cases, for the excited, dangerous, and turbulent they are unsafe; and for the chronic dements, the dirty, the paralytic —who make up so large a part of all asylum population—they involve too much expense, and too extended a supervision, without any commensurate result. Let us have cottages as part of our hospitals by all means. So far as the hospitals under my supervision are concerned, I could wish for a decidedly larger proportion of this class of accommoda-

tion, but I do not anticipate any great amelioration of the condition of the insane by this means, and if the official programme is to be carried out in Victoria I fear it will be a costly mistake. The truth is that no one form of building can meet all the needs and requirements of the insane. Cottages alone will be as unsuitable as "barracks" alone. What is required is variety in the construction, arrangement, and position of the buildings of an asylum; so as to allow of judicious segregation, and to provide for the wants of patients of different classes. If I am to indicate briefly what I consider the best form of asylum; what it is desirable that the Psychopathic Hospital of the future should consist of, I should stipulate for a central hospital for the sick and for acute cases, surrounded by pavilions or blocks of varying form and construction for different classes, and supplemented by cottages for the convalescent, the quiet, and for certain chronic cases. The buildings should stand on a large estate and be spread over a considerable area. They should contain abundant space, with light, airy, cheerful day rooms, large verandahs, and well-ventilated dormitories. It is essential that one-fourth at least of the total accommodation should be in the form of separate or single rooms. It is important, at all events in our climate, that the day-rooms should all be on the ground floor, so as to afford direct and easy access to the verandahs and the open air. It is even more important that the blocks or divisions should be comparatively small, so as to prevent too large an aggregation of patients, and sufficiently numerous so as to allow of a varied classification. These are our main requirements, and I would point to the Eastern Hospital for the Insane at Kankakee, Illinois, as perhaps the best existing model. Special architectural forms or styles are but of secondary importance, but I would plead for space as against outside ornamentation, which is too often only a mockery of the misery within.

The boarding-out of pauper children has been so unqualified a success that it has been assumed that the boarding-out of pauper lunatics is likely also to have a good result. The lunatic colony at Gheel, the boarding-out at Kennoway and other places in Scotland, are each in their way interesting and encouraging experiments. The system, as tried to a very limited extent around the Sussex County Asylum and at other places in England, has not been without good results, and it must not be forgotten that there are in England upwards of 6,000 outdoor pauper lunatics, or upwards of 7 per cent. of the total number of the insane,

mostly living with relatives, and receiving weekly relief from the guardians out of the poor rates; but that it will ever be in Australia a method of providing for any large number of the insane, I very much doubt. I do not propose to discuss the question at length, as it is the subject of separate notice in a paper by Dr. Beattie Smith, but I would point out that with children there is increasing growth, increasing usefulness, increasing intelligence, to appeal to the feelings of their foster parent, whilst with the lunatic there is none of these things, and the conditions are altogether different.

To subsidize, assist, and encourage the friends of the chronic insane to keep them at home, or to remove them from hospitals when fit for such removal, should, I believe, be part and parcel of our asylum system, and in time I believe a very considerable number will be kept in their homes by means of State, parochial, or municipal aid, but whilst wages are high and there is much scope for active employment, the number will not be large.

The antecedent conditions which have rendered Gheel and Kennoway possible—a large waste of poor land, and a miserably poor proprietary who are glad of the added pittance to eke out their want of means—are things which none of us can wish to see in Australia. The well-to-do condition of our working classes renders the boarding-out of the insane (by which I mean paying strangers to receive and take care of them in their homes) at present at all events impracticable, even if it were desirable, whilst the absence of village life, the isolated dwellings, the sparse population, the special dangers and difficulties of "bush" life, and the impossibility of effective medical or parochial supervision, all stand in the way of an adoption of the system, except in very special and occasional cases.

The separation of the idiotic and imbecile from the insane, both by legislative enactment, as I have already indicated, and by the provision of special institutions in which they can be trained and taught, is a matter of very considerable importance, and will, I have no doubt, be undertaken in all the colonies as soon as the number of these patients in each justifies the expense necessary for the special provision. The memorandum of the Committee of the Charity Organization Society, agreed to at meetings held in London in 1877, has been virtually adopted by all who have thought on and worked at this subject.

In a few more years, when the number of the criminal insane has increased, the wisdom of making provision for

this class in separate buildings, if not in separate establishments, will, I have no doubt, be acknowledged and acted on in all the Australian Colonies, as it has been in England, Scotland, Ireland, in the State of New York, and in New South Wales, and provisonally in Victoria and Tasmania. The further question arises whether such provision should be in connection with the Lunacy or the Penal Department. Those patients who are acquitted on the ground of insanity, who are insane first, and whilst insane and irresponsible commit criminal acts, may fairly and properly be placed in wards or establishments in connection with the Lunacy Department; but so far as I can understand there are no valid reasons why arrangements should not be made for the treatment of those who become insane whilst undergoing sentence—who are criminal first and insane afterwards—in connection with the Penal Department. When prisoners undergoing sentence suffer from bodily ailment they are treated in properly provided hospitals in the prisons. Why should not provision be made in prisons also for those suffering from mental ailments and brain diseases? Suitable buildings should not be difficult to provide. The prison surgeon should be as well qualified to treat diseases of the brain as of other organs, and the gaol warder has special qualifications for dealing with this special class. The transfer and re-transfer of these patients from the Penal to the Lunacy Department is a constant difficulty and trouble, the system leads to malingering and to numerous other difficulties in both departments, and it tends to make our asylums into prisons. The practical wisdom of the Scotch has solved the question by establishing wards for criminal lunatics in connection, not with an asylum, but with the general prison at Perth, and an interesting experiment at Woking Prison in England, where all the insane convicts have been kept during the last 11 years, has been reported on at length by Dr. Gover, in an appendix to the report of the Director of Convict Prisons for 1885-86, and has proved a substantial and gratifying success.

The most desirable and necessary onward step, as it appears to me, is a more extended, larger, and more accurate scientific study of insanity. More extended with regard to the medical profession at large. Larger, more accurate and scientific, so far as those specially engaged in asylum work are concerned. I think I am not overstating the question when I say that not half of the medical practitioners in Australia—aye, and in Great Britain also for that matter—

have ever attended a lecture on, or made any study of, mental diseases. In the great Medical School, forming part of the University of Edinburgh, although there is a lecturer on insanity—in every way a master in his speciality—attendance on his lectures is not compulsory, and he is not permitted to set a single question in the examination papers for the degrees granted by the University. Most of the London medical schools have lecturers, but attendance, as at Edinburgh, is voluntary, and the licensing bodies make pyschological medicine no part of their examination. It is quite natural that with so many things a student must know, he holds in light esteem those things about which he may or may not trouble himself at his discretion, and the study of mental phenomena occupies the attention, therefore, of only a few of the more thoughtful students. At some medical schools no provision is made for teaching the subject, and the result is that the overwhelming majority of medical practitioners can, and do, obtain their diplomas to practise without having attended a lecture or answered a question on the subject of mental diseases, seen the inside of a lunatic asylum, or examined a person of unsound mind, except in connection with some physical ailment, as in the delirium of fevers. It is only a necessary consequence of this that abnormal mental processes in their beginnings, slight deviations from mental health—insanity in its most remediable stage—are too often unrecognized and untreated, and when recognized too often regarded as disorders of the intellect rather than diseases of the brain, and held to be beyond the ordinary resources of mental science. It is a consequence also that the medical profession as a body takes but little interest in insanity, and that medical practitioners, as a rule, consider their duty with regard to it to consist in the somewhat perfunctory signature of medical certificates. But more important than all, a host of neurotic individuals become insane, who under proper care need never pass the boundary line, and numerous individuals who, under proper advice, might keep sane, break the laws of mental health with disastrous results to themselves and their offspring. The young Universities of Sydney and Adelaide have very wisely insisted that the study of psychological medicine shall form a compulsory part of the curriculum for their degrees, and that all candidates shall be examined in this subject. The University of Melbourne has, as yet, taken no steps in this direction, but I cannot believe that its medical graduates will much longer be untaught and un-

examined in this important branch of scientific medicine. In this connection, and for other reasons which I cannot now enter on, I regard the proposal to remove both the hospitals for the insane from the neighbourhood of Melbourne, and therefore from the neighbourhood of the University, as wanting in wisdom and forethought. The Metropolitan Hospital for the Insane should be in a manner affiliated to the University, and should be a school of practical teaching, and believe me such teaching will be fraught with the highest good, not only to the students, but to the medical officers of the hospital, will give them a renewed interest in their work, and will lead to a more accurate and systematized knowledge of their subject. I believe that the time is not far distant when all the medical officers of our hospitals for the insane will be engaged in clinical teaching and demonstration, and when arrangements will be made for the assistant medical officer's appointments to be held for limited periods by our newly-fledged graduates. There is yet another step—and one I have for some years held in hopeful view—to complete a system of alienistic medical training, so as to procure an adequate supply of competent and efficient candidates for the various positions in our asylums and other medical offices in the public service, as well as to advance practical psychiatry, and to diffuse a better knowledge of insanity throughout the profession of medicine, and this is the establishment in connection with our chief hospitals for the insane of a system of clinical clerk or assistantships. These positions, corresponding to those of "interne" in continental hospitals, should have a tenure of from six to twelve months, and carry with them residence with adequate provision for board and attendance. Such a system is in force in several of the hospitals for the insane in the United Kingdom, notably at Bethlem, the West Riding, and at Edinburgh. It has been tried with great promise of public utility under the administration of Dr. Workman in Ontario, and the Minister for Public Instruction in Italy, to his honour, and to that of the Italian Government, some time ago initiated a complete and liberal scheme of this kind in connection with the University of Modena, under the direction of Professor Tamburini, the Medical Director of the asylum of Reggio Emilia.

In advocating a larger, more accurate, and scientific study of insanity by all specially engaged in asylum work, I am bound to point out that we have hitherto, at all events till

lately, worked too much within the trammels of a somewhat narrow specialism. We have regarded insanity as standing apart from other diseases, we have gravitated, so to speak, round psychology, and it is only of comparatively late years that we have recognized that diseases of the cerebrum are only a part of the great subject of diseases of the nervous system. The very name of this section of our Congress is in a measure evidence of this, and I would suggest that at our future meetings a Psychological and Neurological section would be a more fitting appellation in relation to the ground which we desire to cover. By the study of general paralysis, which is a disease not only of the brain, but of the whole nervous system, by the ascending course of some diseases of the spinal cord by which ataxic and paraplegic subjects become dements, by examples of general sclerosis of the nervous tissue and other affections, we are being shown the intimate correlation of disease; and the study of cause and effect is demonstrating to us that if a large part of our insanity is not absolutely caused by diseases of other organs, there is no single part of the economy, lesions of which may not bring about psychical disorder in predisposed subjects. We are beginning to understand, but as yet we are far from an accurate and scientific knowledge of what may be called the alterations of neuroses, that though neurotic manifestations may be different in the individual, and interchangeable by inheritance from generation to generation, they are practically of one family and essence. In truth, as has been well said by a recent writer: "We have crossed the threshold of the great temple of mind, but we know little of the inner sanctuaries." This knowledge can only come by adding to our empirical work and observations a scientific comparative study of the homologies of disease.

That the study of insanity has heretofore not been as scientific and accurate as is desirable is not the fault of the medical officers of hospitals for insane in Australia. They are overweighted and overburdened with other work, and until their number is increased in proportion to the patients under their charge, they cannot undertake the pathological, the microscopical, and the scientific therapeutical work which should be steadily progressing in every hospital.

I believe that the large majority of those engaged in the care and treatment of the insane are duly impressed with the advantage, nay, the necessity of systematic and varied amusements as an aid in curative treatment, and the increasing percentage of patients actively and usefully employed in

our asylums shows that the value of employment towards the same end is duly appreciated.

The importance of a generous dietary, indeed of a wise liberality in the matter of food, is fully recognized, and not a few of us are disciples of the "gospel of fatness," so ably and eloquently preached by Dr. Clouston, but I believe there are some curative agents which are neither as fully nor as wisely employed as they should be, and which it behoves us to use with greater accuracy, greater care, and greater method. And first as to drugs—medical men, and those practising our specialty in common with the rest of the profession, have become only too often sceptics in medicine as well as in religion, and to quote a distinguished American alienist, they "give their physic as they say their prayers —without expecting any immediate or any literal answer." Now I would deprecate this mental attitude, and urge a more liberal, and more accurate, and, in some cases, a more continuous employment of drugs. Considering the immense importance of sleep, do we study sufficiently the old vegetable neurotics and their alkaloids, and the newer chemical compounds, in regard to their action and their dosage with the view of producing sound, and yet harmless sleep? Do we not fail in many of the cases in which we do employ sedatives because we measure out inadequate quantities to calm the excitement of mania, or the distress of melancholia? Considering the marked trophic changes in many forms of insanity, do we employ the alteratives such as arsenic and the milder mercurials, alkaline salts, and the nervine and vasi-motor tonics and stimulants with sufficient discrimination and for sufficient periods of time? Considering the marked dryness of hair and skin and the malodorous character of the cutaneous secretions, is our knowledge or our practice of hydrotherapeutics either creditable or satisfactory? Is the Turkish bath employed either as frequently or as fully as it might and should be, and is our use of simple or medicated baths carried out even to the full scope of the means at our command? The physical inaction of a number of the insane, especially in some of the forms of mental stupor and dementia, points to massage as a curative agent as yet too little used and understood in our specialty. The obvious relation of electricity to nervous force and the extreme sensitiveness of our patients to electrical change, as evidenced by increased excitement and noise, and by more frequent and severe epileptic fits during times of electrical and atmospheric disturbances, are well known. The influence

of electricity on some of the more obscure nutritive changes is recognized, and the treatment of some forms of insanity by the continuous current has been more than favourably reported of. But has galvanism been with us thus far, except in a few instances, much more than a scientific toy?

There is surely much for us to do in this, and in other directions I have indicated, towards the scientific treatment of insanity. Among other things, our hospitals should be great fields for brain surgery, the brilliant results attending which are of the highest interest and importance. Another direction in which I anticipate progress is the systematic training of attendants and nurses for their special duties. This training shall include a knowledge of general as well as special nursing, and to this end the general hospitals should render us assistance by receiving for definite periods our attendants and nurses for training on their staff. So far the system is as yet in its infancy in these colonies, but Dr. Sinclair and Dr. Ross, who have been working for two years at Gladesville, are more than gratified with the result, which, to my mind, is most satisfactory. The effort to improve the qualification of those in immediate attendance and care of patients promises great benefit to the insane, and I am making no rash prediction in saying that within another decade no attendants or nurses will be employed in State Hospitals for the Insane in these colonies, except as probationers, who have not gone through a systematic course of training and instruction in their duties, and received certificates of their fitness for their special work.

Did time permit, I might go on to indicate some of the hindrances, the troubles, and difficulties which are known only to those who are engaged in lunacy work, but I should serve no practical purpose. Insanity, though a most interesting, will always be an unpopular subject, and one in which little or no outside interest will come to our aid. Most of the progress which I have indicated must come from within rather than from without, and though I believe that the care and treatment of the insane, and our knowledge of insanity, will steadily improve, and a more intelligent interest arise in our work, especially among the members of the medical profession, we shall in the future, as in the past in only too many cases, and for some years to come, have to do perforce of circumstances what is expedient or possible, instead of what is right and best, and to be content, or as content as we can, with an attainable good instead of an unattainable better.

TABLE I.—Showing Population of Australian Colonies and the Number of the Registered Insane on 31st December, 1887, together with the Proportion of Insane to Population at that Date and on 31st December, 1877.

Year of Foundation of Colony.	Colony.	Population, 31st December, 1887.			Number of Insane, 31st December, 1887.			Proportion of Insane to Population, 31st Dec., 1887.			Proportion of Insane to Population, 31st Dec., 1877.		
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1788	New South Wales	574,012	468,907	1,042,919	1,735	1,086	2,821	3·03 per 1,000, or 1 in 330.	2·32 per 1,000, or 1 in 431.	2·71 per 1,000, or 1 in 369.	3·13 per 1,000, or 1 in 319.	2·29 per 1,000, or 1 in 435.	2·76 per 1,000, or 1 in 362.
1851 (separated from N.S.W.)	Victoria	550,050	486,060	1,036,110	1,886	1,633	3,519	3·42 per 1,000, or 1 in 291.	3·35 per 1,000, or 1 in 297.	3·39 per 1,000, or 1 in 294.	3·68 per 1,000, or 1 in 271.	3·01 per 1,000, or 1 in 332.	3·36 per 1,000, or 1 in 296.
1836	South Australia ...	168,336	154,952	323,288	421	329	750	2·50 per 1,000, or 1 in 400.	2·12 per 1,000, or 1 in 471.	2·31 per 1,000, or 1 in 431.	2·11 per 1,000, or 1 in 473.	1·92 per 1,000, or 1 in 523.	2·01 per 1,000, or 1 in 496.
1859 (separated from N.S.W.)	Queensland	214,531	152,409	366,940	554	320	874	2·58 per 1,000, or 1 in 387.	2·10 per 1,000, or 1 in 476.	2·38 per 1,000, or 1 in 419.	2·03 per 1,000, or 1 in 491.	2·08 per 1,000, or 1 in 479.	2·05 per 1,000, or 1 in 487.
1804	Tasmania	74,784	65,061	139,845	193	157	350	2·58 per 1,000, or 1 in 387.	2·41 per 1,000, or 1 in 414.	2·50 per 1,000, or 1 in 399.	3·78 per 1,000, or 1 in 264.	2·43 per 1,000, or 1 in 411.	3·15 per 1,000, or 1 in 317.
1829	Western Australia	24,807	17,681	42,488	79	42	121	3·18 per 1,000, or 1 in 314.	2·37 per 1,000, or 1 in 421.	2·84 per 1,000, or 1 in 351.	2·11 per 1,000, or 1 in 472.	2·78 per 1,000, or 1 in 359.	2·38 per 1,000, or 1 in 419.
	Total	1,606,520	1,345,070	2,951,590	4,868	3,567	8,435	3·03 per 1,000, or 1 in 330.	2·65 per 1,000, or 1 in 377.	2·86 per 1,000, or 1 in 349.	3·03 per 1,000, or 1 in 330.	2·52 per 1,000, or 1 in 396.	2·80 per 1,000, or 1 in 356.
1840	New Zealand.....	347,398	297,932	645,330	1,053	642	1,695	3·03 per 1,000, or 1 in 329.	2·15 per 1,000, or 1 in 464.	2·63 per 1,000, or 1 in 380.	2·47 per 1,000, or 1 in 404.	1·66 per 1,000, or 1 in 603.	2·09 per 1,000, or 1 in 479.

TABLE II.—Showing the Proportion of Insane to Population in England, Scotland, and Ireland, on 31st December, 1887.

COUNTRY.	POPULATION.			NUMBER OF INSANE.			PROPORTION OF INSANE TO POPULATION.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
England* ...	13,931,592	14,697,212	28,628,804	37,601	45,042	82,643	1 in 370, or 2·69 per 1,000.	1 in 326, or 3·06 per 1,000.	1 in 346, or 2·88 per 1,000.
Scotland† ...	...	...	3,991,499	5,444	6,165	11,609	...	...	1 in 343, or 2·91 per 1,000.
Ireland‡	...	...	4,837,352	7,681	7,582	15,263	...	...	1 in 316, or 3·16 per 1,000.
TOTAL	...	...	37,457,655	50,726	58,789	109,515	...	...	1 in 342, or 2·92 per 1,000.

* Report of Commissioners in Lunacy, England, for 1887. † Report of Commissioners in Lunacy, Scotland, for 1887.

‡ Report of Inspector of Asylums, Ireland, for 1887.

TABLE III.—Showing the Population of the Australian Colonies, the Number of Patients admitted to Asylums, and the Proportion of Admissions to Population for the Ten Years, 1878 to 1887 inclusive.

Year.	New South Wales.			Victoria.			South Australia.			Queensland.		
	Population.	Number of Admissions to Asylums.	Proportion to Population.	Population.	Number of Admissions to Asylums.	Proportion to Population.	Population.	Number of Admissions to Asylums.	Proportion to Population.	Population.	Number of Admissions to Asylums.	Proportion to Population.
1878	693,743	424	1 in 1,636	827,439	560	1 in 1,477	248,795	203	1 in 1,225	210,510	120	1 in 1,754
1879	734,282	440	1 in 1,668	840,620	585	1 in 1,437	259,460	195	1 in 1,330	217,851	133	1 in 1,638
1880	770,524	476	1 in 1,618	860,067	547	1 in 1,572	267,573	223	1 in 1,200	215,054	145	1 in 1,483
1881	781,265	494	1 in 1,581	882,232	544	1 in 1,621	286,324	199	1 in 1,439	226,968	132	1 in 1,719
1882	817,468	473	1 in 1,728	906,225	465	1 in 1,949	293,509	224	1 in 1,310	248,255	136	1 in 1,825
1883	869,310	476	1 in 1,826	931,790	480	1 in 1,941	310,967	213	1 in 1,497	287,475	160	1 in 1,796
1884	921,129	493	1 in 1,868	961,276	547	1 in 1,755	318,300	209	1 in 1,523	309,913	175	1 in 1,770
1885	980,573	567	1 in 1,729	991,839	519	1 in 1,911	319,769	219	1 in 1,640	326,916	221	1 in 1,479
1886	1,030,762	567	1 in 1,817	1,003,043	595	1 in 1,685	318,785	207	1 in 1,540	342,614	205	1 in 1,671
1887	1,042,919	532	1 in 1,960	1,036,110	657	1 in 1,577	323,288	192	1 in 1,683	366,940	234	1 in 1,568
10 Years	8,641,975	4,942	1 in 1,749	9,240,641	5,499	1 in 1,680	2,946,770	2,084	1 in 1,414	2,752,496	1,661	1 in 1,657

Year.	Tasmania.			Western Australia.			Total Australian Colonies (except Western Australia).		
	Population.	No. of Adms. to Asylums.	Proportion to Population.	Population.	No. of Adms. to Asylums.	Proportion to Population.	Population.	No. of Adms. to Asylums.	Proportion to Population.
1878	108,525	34	1 in 3,191	...	...	...	2,089,012	1,341	1 in 1,550
1879	111,208	53	1 in 2,098	...	...	...	2,163,421	1,406	1 in 1,538
1880	113,615	36	1 in 3,155	...	...	...	2,226,833	1,427	1 in 1,560
1881	117,314	48	1 in 2,444	...	...	...	2,294,103	1,417	1 in 1,619
1882	120,701	52	1 in 2,321	...	...	...	2,386,158	1,350	1 in 1,767
1883	124,350	47	1 in 2,645	...	...	...	2,523,892	1,376	1 in 1,834
1884	128,380	65	1 in 1,975	...	...	...	2,638,998	1,489	1 in 1,772
1885	132,166	58	1 in 2,278	...	...	...	2,751,263	1,584	1 in 1,737
1886	135,501	42	1 in 3,226	...	...	...	2,830,705	1,616	1 in 1,751
1887	139,845	59	1 in 2,370	...	...	...	2,909,102	1,674	1 in 1,738
10 Years.	1,231,605	494	1 in 2,493	...	...	...	24,813,487	14,680	1 in 1,690

Table IV.—Showing the Nativity of the Patients under Care in Australian Asylums during the Year 1887.

NATIVITY.	New South Wales.			Percentage.			Victoria.			Percentage.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Born in the Colony or other British Colonies	588	458	1,046	29·47	35·70	31·91	434	350	784	19·02	18·31	18·70
do. Great Britain — England and Wales	524	277	801	26·27	21·59	24·43	477	317	794	20·90	16·59	18·93
do. Great Britain — Scotland	100	60	160	5·01	4·68	4·88	160	147	307	7·01	7·69	7·32
do. Great Britain — Ireland	485	437	922	24·31	34·06	28·13	494	562	1,056	21·65	29·41	25·19
do. France	14	5	19	0·70	0·39	0·58	12	...	12	0·52	...	0·29
do. Germany	67	14	81	3·36	1·09	2·47	49	26	75	2·15	1·36	1·79
do. China	78	...	78	3·91	...	2·38	99	...	99	4·34	...	2·36
do. Other Countries*	139	32	171	6·97	2·49	5·22	557	509	1,066*	24·41	26·64	25·42
Total	1,995	1,283	3,278	100·00	100·00	100·00	2,282	1,911	4,193	100·00	100·00	100·00

NATIVITY.	South Australia.			Percentage.			Queensland.			Percentage.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Born in the Colony or other British Colonies	109	85	194	20·45	21·09	20·73	92	39	131	13·98	10·08	12·54
do. Great Britain — England and Wales	198	134	332	37·15	33·25	35·47	177	97	274	26·90	25·06	26·22
do. Great Britain — Scotland	42	31	73	7·88	7·69	7·80	57	30	87	8·66	7·75	8·32
do. Great Britain — Ireland	104	130	234	19·51	32·26	25·00	170	179	349	25·84	46·25	33·40
do. France	3	1	4	0·57	0·25	0·42	1	...	1	0·15	...	0·09
do. Germany	42	22	64	7·88	5·46	6·84	50	25	75	7·60	6·46	7·18
do. China	6	...	6	1·12	...	0·65	40	...	40	6·08	...	3·83
do. Other Countries*	29	...	29	5·44	...	3·09	71	17	88	10·79	4·40	8·42
Total	533	403	936	100·00	100·00	100·00	658	387	1,045	100·00	100·00	100·00

TABLE IV. (*Continued.*)

NATIVITY.	TASMANIA.			Percentage.			WESTERN AUSTRALIA.			Percentage.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Born in the Colony or other British Colonies	89	41	130	38·87	24·55	32·83	15	10	25	15·46	22·22	17·61
do. Great Britain — England and Wales	72	15	87	31·44	8·98	21·97	39	9	48	40·21	20·00	33·80
do. Great Britain — Scotland	14	14	28	6·11	8·38	7·07	3	2	5	3·09	4·45	3·52
do. Great Britain — Ireland	43	19	62	18·78	11·38	15·66	24	24	48	24·74	53·33	33·80
do. France	...	...	...	...	...	...	...	...	...	...	...	...
do. Germany	...	1	1	...	0·60	0·25	2	...	2	2·06	...	1·41
do. China	2	...	2	0·87	...	0·50	8	...	8	8·25	...	5·63
do. Other Countries*	9	77	86*	3·93	46·11	21·72	6	...	6	6·19	...	4·23
TOTAL	229	167	396	100·00	100·00	100·00	97	45	142	100·00	100·00	100.00

NATIVITY.	TOTAL. AUSTRALIAN COLONIES.			Percentage.			NEW ZEALAND.			Percentage.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Born in the Colony or other British Colonies	1,327	983	2,310	22·90	23·43	23·12	92	68	160	8·74	10·59	9·44
do. Great Britain — England and Wales	1,487	849	2,336	25·67	20·23	23·38	375	210	585	35·61	32·71	34·51
do. Great Britain — Scotland	376	284	660	6·49	6·77	6·61	166	116	282	15·76	18·07	16·64
do. Great Britain — Ireland	1,320	1,351	2,671	22·78	32·20	26·74	266	206	472	25·26	32·09	27·85
do. France	30	6	36	0·52	0·14	0·36	8	6	14	0·76	0·93	0·82
do. Germany	210	88	298	3·62	2·10	2·98	24	9	33	2·28	1·40	1·95
do. China	233	...	233	4·02	...	2·33	26	...	26	2·47	...	1·53
do. Other Countries*	811	635	1,446	14·00	15·13	14·48	96	27	123	9·12	4·21	7·26
TOTAL	5,794	4,196	9,990	100·00	100·00	100·00	1,053	642	1,695	100·00	100·00	100·00

* The returns from Victoria and Tasmania show a large proportion under the heading of "other countries" and "unknown." In all the other Colonies the nationality of all the patients is known, and all shown under the heading of "other countries" are foreigners belonging to countries other than France, Germany, and China.

TABLE V.—Showing the Recovery and Death Rate in Australian Asylums for the Year 1887 and for the Decennial Period ending 31st December, 1887.

	New South Wales.			Victoria.			South Australia.			Queensland.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Percentage of Recoveries on Admissions and Re-admissions ..... For the year ending Dec. 31, 1887	34·63	49·50	40·22	37·60	47·24	41·85	30·8	26·7	29·2	41·00	57·50	46·88
Percentage of Patients Relieved on Admissions and Re-admissions For the year ending Dec. 31, 1887	3·31	7·00	4·69	1·63	0·68	1·21	20 5	28·0	23·4	2·6	2·5	2·13
Total percentage of Patients Recovered and Relieved on Admissions and Re-admissions..... For the year ending Dec. 31, 1887	37·94	56·50	44·91	39·23	47·92	43·06	51·3	54·7	52·6	43·6	60·00	49·01
Percentage of Recoveries on Admissions and Re-admissions..... For decennial period ending Dec. 31, 1887	41·10	41·49	41·25	41·01	49·13	44·51	42·7	32·4	38·6	42·63	48·98	45·00
Percentage of Patients Relieved on Admissions and Re-admissions For decennial period ending Dec. 31, 1887	5·64	9·24	6·98	2·69	2·18	2·47	13·8	29·0	19·8	3·56	5·47	4·22
Total Percentage of Patients Recovered and Relieved on Admissions and Re-admissions..... For decennial period ending Dec. 31, 1887	46·74	50·73	48·23	43·70	51·31	46·98	56·5	61·4	58·4	46·19	54·45	49·22
Percentage of Deaths on average number Resident ..... For the year ending Dec. 31, 1887	6·64	7·03	6·79	8·91	5·40	7·30	12·4	10·1	11·4	6·87	6·09	6·58
Percentage of Deaths on average number Resident ..... For decennial period ending Dec. 31, 1887	7·43	5·52	6·72	8·57	5·25	7·11	10·2	7·5	9·0	6·42	4·93	5·82

TABLE V. (*Continued.*)

	Tasmania.			Western Australia.			Percentage for all Australian Colonies (except Western Australia).			New Zealand.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Percentage of Recoveries on Admissions and Re-admissions..... For the year ending Dec. 31, 1887	22·85	8·33	16·94	...	...	...	35·82	45·44	39·66	40·39	48·75	43·61
Percentage of Patients Relieved on Admissions and Re-admissions For the year ending Dec. 31, 1887	8·57	25·00	15·27	...	...	...	4·77	6·72	5·55	9·41	8·12	8·91
Total percentage of Patients Recovered and Relieved on Admissions and Re-admissions..... For the year ending Dec. 31, 1887	31·42	33·33	32·21	...	...	...	40·59	52·16	45·22	49·80	56·87	52·52
Percentage of Recoveries on Admissions and Re-admissions..... For decennial period ending Dec. 31, 1887	28·16	25·60	27·08	...	...	...	41·06	43·64	42·09	29·18	34·97	31·20
Percentage of Patients Relieved on Admissions and Re-admissions For decennial period ending Dec. 31, 1887	9·85	17·87	13·23	...	...	...	5·58	9·04	6·97	7·57	10·36	8·65
Total percentage of Patients Recovered and Relieved on Admissions and Re-admissions..... For decennial period ending Dec. 31, 1887	38·01	43·47	40·31	...	...	...	46·65	52·68	49·07	36·75	45·33	39·85
Percentage of Deaths on average number Resident ..... For the year ending Dec. 31, 1887	12·24	0·67	7·24	...	...	...	8·30	6·24	7·42	7·15	4·40	6 13
Percentage of Deaths on average number Resident ..... For decennial period ending Dec. 31, 1887	10·78	5·22	8·00	...	...	...	8·19	5·52	7·09	6·85	4·16	5·94

TABLE VI.—Showing the Classification of the Insane in the Australian Colonies on 31st December, 1887.

COLONY.	IDIOTS AND IMBECILES. (Including all cases of undeveloped intellect, congenital or acquired.)			Percentage.			CRIMINALS. (Including all serving sentences, awaiting trial, or detained during the Governor's pleasure.)			Percentage.			CONVICTS. (Still at the charge of the Imperial Treasury.)			Percentage.		
	Male.	Fem.	Tot.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Fem.	Tot.	Male.	Female.	Total.
New South Wales	127	113	240	7·31	10·40	8·50	53	9	62	3·05	0·82	2·19	15	3	18	0·86	0·27	0·63
Victoria	201	132	333	10·65	8·08	9·46	39	8	47	2·06	0·48	1·33	...	...	...	...	...	...
South Australia...	59	40	99	14·01	12·15	13·20	78	19	97	18·52	5·57	12·93	...	...	...	...	...	...
Queensland	35	29	64	6·31	9·06	7·32	11	2	13	1·98	0·62	1·48	...	...	...	...	...	...
Tasmania	17	12	29	8·80	7·64	8·28	26	11	37	13·47	7·00	10·57	35	...	35	18·13	...	10·00
Western Australia	15	9	24	18·98	21·42	19·83	2	1	3	2·53	2·38	2·47	30	...	30	37·97	...	24·79
TOTAL	454	335	789	9·32	9·39	9·35	209	50	259	4·29	1·40	3·07	80	3	83	1·64	0·08	0·98
New Zealand	166	83	249	15·76	12·92	14·69	47	12	59	4·46	1·86	3·48	...	...	...	...	...	...

COLONY.	ORDINARY INSANE. (Not included under either of the foregoing heads.)			Percentage.			TOTAL.			Deemed Curable.	Percentage.	Deemed Incurable.	Percentage.	TOTAL.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.					
New South Wales	1,540	961	2,501	88·76	88·48	88·65	1,735	1,086	2,821	521	18·46	2,300	81·53	2,821
Victoria.....	1,646	1,493	3,139	87·27	91·42	89·20	1,886	1,633	3,519	319	9·06	3,200	90·93	3,519
South Australia	284	270	554	67·45	82·06	73·86	421	329	750	199	26·53	551	73·46	750
Queensland	508	289	797	91·69	90·31	91·18	554	320	874	94	10·75	780	89·24	874
Tasmania	115	134	249	59·58	85·35	71·14	193	157	350	43	12·28	307	87·71	350
Western Australia.....	32	32	64	40·50	76·19	52·89	79	42	121	12	9·91	109	90 08	121
TOTAL	4,125	3,179	7,304	84·73	89·12	86·59	4,868	3,567	8,435	1,188	14·08	7,247	85·91	8,435
New Zealand	840	547	1,387	79·77	85·20	81·82	1,053	642	1,695	...	...	...	...	...

TABLE VII.—Showing the Number of Epileptics and General Paralytics admitted into Australian Asylums during the Year 1887, and into English Asylums during the Year 1886, with the Proportion (per cent.) to the Total Number Admitted.

Year.	COUNTRY.	Total Number of Patients Admitted.			Of Total Number of Patients Admitted.						Proportion (per cent.) of Epileptics and General Paralytics Admitted to the Total Number of Patients Admitted.					
					Number of Epileptics.			Number of General Paralytics.			Epileptics.			General Paralytics.		
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1887	New South Wales	321	194	515	28	14	42	14	1	15	8·7	7·2	8·1	4·3	0·5	2·9
1887	Victoria	490	345	835	27	20	47	8	...	8	5·5	5·7	5·6	1·6	...	0·9
1887	South Australia	116	91	207	4	5	9	3	2	5	3·4	5·4	4·3	2·5	2·1	2·4
1887	Queensland	132	73	205	6	6	12	2	...	2	4·5	8·2	5·8	1·5	...	0·9
1887	Tasmania	35	24	59	3	2	5	4	...	4	8·5	8·3	8·4	11·4	...	6·7
1887	Western Australia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total Australian Colonies (except Western Australia)	1,094	727	1,821	68	47	115	31	3	34	6·2	6·4	6·3	2·8	0·4	1·8
1887	New Zealand.....	255	161	416	9	3	12	11	1	12	3·5	1·8	2·8	4·3	0·6	2·8
1886	England.....	6,712	6,912	13,624	710	522	1,232	964	213	1,177	10·5	7·5	9·0	14·3	3·0	8·6

Table VIII.

Showing Number of Patients and Number of General Paralytics Admitted for Five Years, 1883 to 1887 inclusive, to Institutions for the Insane, New South Wales.

Year.	Total of Patients Admitted.			Total of General Paralytics Admitted.			Percentage of General Paralytics.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1883	278	178	456	15	3	18	5·3	1·6	3·9
1884	294	186	480	19	...	19	6·4	...	3·9
1885	332	220	552	14	1	15	4·2	0·4	2·7
1886	356	193	549	18	3	21	5·0	1·5	3 8
1887	321	194	515	14	1	15	4·3	0·5	2·9
Total for 5 years.....	1,581	971	2,552	80	8	88	5·0	0·8	3·4

Showing Number of Patients and Number of General Paralytics Admitted for Five Years, 1882 to 1886 inclusive, to English Asylums.

Year.	Total of Patients Admitted.			Total of General Paralytics Admitted.			Percentage of General Paralytics.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1882	6,663	6,918	13,581	923	228	1,151	13·8	3·3	8·5
1883	7,017	7,441	14,458	918	242	1,160	13·1	3·2	8·0
1884	7,075	7,233	14,308	986	206	1,192	13·9	2·8	8·3
1885	6,345	6,813	13,158	952	223	1,175	15·0	3·2	8·9
1886	6,712	6,912	13,624	964	213	1,177	14·3	3·0	8·6
Total for 5 years.....	33,812	35,317	69,129	4,743	1,112	5,855	14·0	3·1	8·4

On the Cure of the Morphia and Alcoholic Habit. By W. S. Playfair, M.D., LL.D., F.R.C.P.

The January number of the Journal contains a most interesting paper, entitled "The Confessions of a Young Lady Laudanum Drinker," which relates what the writer went through during the endeavour to break off the pernicious habit she had acquired. In this instance after the daily dose of laudanum had been spontaneously lessened from four ounces to one quarter of an ounce, the supply was suddenly stopped. It does not appear that any means were taken to lessen the physical and moral tortures which followed, and which the writer so vividly describes as to give one a better idea of the condition of such patients than I have elsewhere seen. Fortunately the desired end was gained, but my experience in dealing with such difficult and unhappy cases convinces me at the cost of much more suffering than need have been, had another method been followed.

The views of the profession on the management of these cases are, I think, very unsettled. By some we are advised to insist on a sudden withdrawal of the deleterious drug, by others to drop it gradually, but I am not aware that any recognized principles are established for minimizing the suffering which either plan entails. During the past few years I have had several very interesting cases under my care, in which the patient has been treated with the view of breaking off not only the morphia habit, but the analogous habits of chloral and alcoholic excess. The plan I have adopted has been to break off the use of these drugs during a course of systematic treatment by complete rest and isolation, accompanied by massage and over-feeding. I have been greatly struck with the powerful aid which such a treatment gives in gaining the desired result. I have not yet met with a case which has proved unsuccessful, nor have I seen a single one, although in some of mine the amount of the drug consumed was far larger than that taken by the young lady whose letter I have referred to, in which the accompanying distress was anything in the least approaching to that which she describes. Indeed, I have often been greatly surprised at the ease with which the drugs have been discontinued under the treatment I have adopted, and at the small amount of discomfort entailed. It is a well

recognized fact that the giving up of any of these habits is usually accompanied by much suffering, but it is not one which I should have discovered by the observation of the cases which I have treated. I think it will not be difficult to show why this method of treatment answers so well. In all cases in which any of these fatal habits have been acquired, by the time medical advice is sought, there has generally been a complete breakdown, both physical and moral. The patient has neither the strength of mind or will to resist the temptation to which she has succumbed, nor has she the physical strength to battle with the suffering which cutting off the drug entails, for its long-continued abuse has almost invariably reduced her to a state of wretched ill-health. Anyone who has had the opportunity of watching the extraordinary effect of the systematic treatment I have alluded to in restoring the health through improved nutrition, will be able to understand how it should act so well. The rapid change by which a patient totally unable to eat, wasted and emaciated, is enabled to assimilate large quantities of food, and to gain flesh and strength with startling rapidity, is almost incredible to those who have not witnessed it. It is by no means surprising that such a change in the general health should be the best possible means of enabling the patient to overcome the difficulties inherent in the attempt to break her of the pernicious habit she has acquired. Great benefit also accrues from the well-regulated surroundings of the patient, the complete rest in bed, the avoidance of all possibility of yielding to temptation, the comfort and guidance of a thoroughly trained nurse, and the absence of all excitement and worry. I know of no other conditions so favourable, and certainly the result has been, in my experience, uniformly successful. Of course there can be no guarantee against relapse after this, or any other way of dealing with such cases. To ensure this is a matter which is beyond the power of any treatment whatever, and must depend, to a great extent, on the subsequent management of the patient. So far, however, I have not heard of relapse in any of the cases I have treated, and which I have discharged as cured. The details of the management I cannot here describe. I have entered fully into them in former publications.* I can only say that when we resort to systematic treatment for this or any other

* "The Systematic Treatment of Nerve Prostration and Hysteria." Smith Elder, and Co.

cause, much of the success depends on the thoroughness and completeness with which it is carried out. The method is in many ways so troublesome, costly, and irksome, that there is a strong temptation to modify it, either by treating the patient in her own house, or by admitting the visits of friends and the like. I have long satisfied myself that all such modifications are fatal to success, and will infallibly lead to failure and disappointment. I cannot too strongly urge that if this plan be adopted, it should be minutely carried out in all its details, or it had much better be left alone.

In illustration of these remarks I append very brief notes of one or two cases of the kind I have selected from many that have been under my care. Some of them were first sent to me because of the neurotic conditions under which they laboured, and it often happens that the habit of morphia- or chloral-taking has been insensibly acquired when these drugs were originally prescribed for the relief of symptoms. I trust I may not be misunderstood if I point out the grave responsibility which the medical attendant of such a case incurs by placing narcotic drugs at the uncontrolled disposal of a neurotic woman. I am sorry to say that I have seen not one, but many cases directly traceable to errors of judgment of this kind. I have even come across more than one instance in which a medical man has actually taught a patient the use of the hypodermic needle, and placed in her hands a bottle of morphia solution to use at her own discretion. Anything more reprehensible it would be difficult to conceive. It may be remarked, in passing, that the use of the hypodermic syringe is apparently becoming a very common method of taking morphia; and it may be consumed in this way in much larger doses than in any other. In both the cases related below it was the method adopted, and in another patient lately under my care no less than seven syringes, and an equivalent number of bottles of morphia solution were found secreted in her trunks. This patient was sent to me as the victim of alcoholic excess, and so little was her habit of morphia taking known, that her medical man wrote to me, when I had informed him of this fact, "I knew that Mrs. —— injected morphia occasionally, but I had not the least idea that she had done so to an injurious extent, and what you tell me is a painful surprise." This is a curious example of the deceptions practised by these patients on all by whom they are surrounded.

I was first led to a knowledge of the value of this treatment in the morphia habit by the following case:—

Case I.—One of the first I subjected to systematic treatment, and subsequent experience shows me that her management was in many ways very defective, but the result was altogether satisfactory. I need not enter into the general history beyond saying that it was an extreme example of general nervous depression. The lady, who was forty-six years of age, thus writes of herself: "I can hardly tell you what a deep sufferer, and how prostrate I have been. For years I have led a completely sedentary life, always lying; it is the position I am easiest in." I found her, as might have been anticipated, pale, anæmic, and very wasted, and with her nutrition at the lowest ebb. She had no appetite, and consumed hardly any food—a snipe, or the wing of a pigeon, with half a cupful of bread and milk, constituting all she took in twenty-four hours. She had the morphia habit strongly developed, her maid giving her hypodermic injections of four minims of the pharmacopœial solution ten times daily, sometimes much oftener, equivalent, at the least, to six grains of solid morphia; besides which she took draughts of chloral and morphia twice daily. Within ten days of the commencement of treatment by rest and massage she was taking three full meals daily, besides two quarts of milk and two basins of soup, and she rapidly gained flesh and strength. It was quite surprising to note how, at the end of a week, she had lost her depression, and had become comparatively bright and very hopeful. The hypodermic injections were gradually lessened in number and strength, and in a fortnight all sedatives were discontinued. This lady was treated nine years ago. She has since remained in good health, has travelled in America and the Cape, and has never shown the slightest disposition to recur to the use of narcotics.

Case II.—In November, 1888, I was asked to see a lady, sixty-two years of age. Her husband wrote of her: "Her present condition is one of extreme debility from want of regular food, and partaking of an extreme degree of morphia, as well as brandy, champagne, etc., as pick-me-ups. She is in a most depressed state of mind and spirits, perfectly unable to rouse herself." I never was able to ascertain how much morphia this patient consumed, as she was most reticent on the subject, but the habit had been commenced forty years ago, after the birth of her only child, she being then twenty-two years of age, and had been steadily indulged in, without break or intermission, ever since. The amount taken was obviously very excessive, and it was consumed in every conceivable way, by the mouth as well as hypodermically. She dealt with chemists in all parts of the town, so that it was impossible to control the supply, especially as the patient prided herself on the amount she took, and never could be got to admit that her

habits were reprehensible. She always referred triumphantly to the advice of an eminent physician, long since dead, who had first prescribed morphia for her, whose alleged dictum that her constitution required it was invariably quoted as an unanswerable argument against any attempt to lessen the amount taken. This patient was on this account exceedingly difficult to deal with, but yet the habit was entirely broken. In less than two months she had put on some thirty pounds in weight, and is now bright, cheerful, and exhibits as yet no tendency to resume the use of narcotics, although, of course, the permanency of the result remains to be tested. As she was quite unwilling to give the slightest assistance, the fight was an uphill one, but the narcotics were entirely discontinued in about ten days, nor do I think the suffering resulting from their disuse was at any time considerable. As this lady ruled in her own house with a rod of iron, husband, servants, and everyone connected with her being absolutely at the mercy of her caprice and will, it is perfectly obvious that no other plan but complete isolation could possibly have induced her to break off the habit indulged in for so many years without any attempt at control.

The above are typical examples of the cure of the morphia habit developed to the most extreme degree. Even in these no very excessive difficulty was experienced, and it is needless to say that cases less strongly marked would be much more easily dealt with.

It will be observed that I have said nothing as to the use of drugs such as camphor, caffeine, and the like, which have been recommended. I have relied solely on improved nutrition, coincident with the diminution of the morphia, and have never administered any kind of medicine.

The following are two examples of the cure of alcoholic excess by the same means:—

Case III.—Mrs. ——, æt 30, was sent to me for treatment in the hope of curing her of the habit of taking stimulants and chlorodyne, both of which she took to a very great extent. She was very emaciated, and in a highly nervous condition, and it was reported to me that no effort which had been made to break off the habit had been successful. Moreover, she resorted to every possible device to obtain brandy and chlorodyne, and I was informed that no reliance could be placed on any statement she made, that she would sell her jewellery to procure the stimulant when it was withheld from her, and that she would spare herself no humiliation to obtain it. This seemed to me so unpromising a case that I hesitated very much to treat it. The result, however, was most satisfactory. After six weeks' isolation she was

sent away apparently cured, and has since remained for three years in perfect health, with no recurrence of her former habit.

Case IV.—In November last I was consulted about ——, æt 25. This lady had recently suffered from severe mental shock, and had since given herself up to excessive drinking. She was living by herself, had no one to control her, and all the efforts of her medical man to limit the amount she took had proved useless. The nurse who was in charge of the case reported that during the six weeks she had been with her she had consumed, on an average, one bottle of brandy, one bottle of champagne, and one bottle of port daily. It is needless to say that after such a prolonged bout of heavy drinking she was in a most deplorable condition. She could neither eat nor sleep, and was in a state of nervous irritation, closely verging on delirium tremens. From the instant the patient was isolated, and put completely under rest and massage, a most rapid and striking change took place. Soon she began to eat largely, the dirty, foul tongue cleaned, sleep returned, and she made, practically, no difficulty in giving up the use of the stimulant. At the end of six weeks she went on a sea voyage, apparently quite well. I have not since heard of the patient. I have, however, no reason to suspect that she has relapsed.

I have placed these notes together in the hope that they will facilitate the management of these difficult and unfortunate cases, and enable the practitioner to treat them by a more rational and common sense method than has hitherto been adopted.

Notes of Ten Years' Experience in the Use of the Turkish Bath in the Treatment of Mental Ill-health. By Robert Baker, M.D., Medical Superintendent of the Retreat, York.*

(*With Plan*).

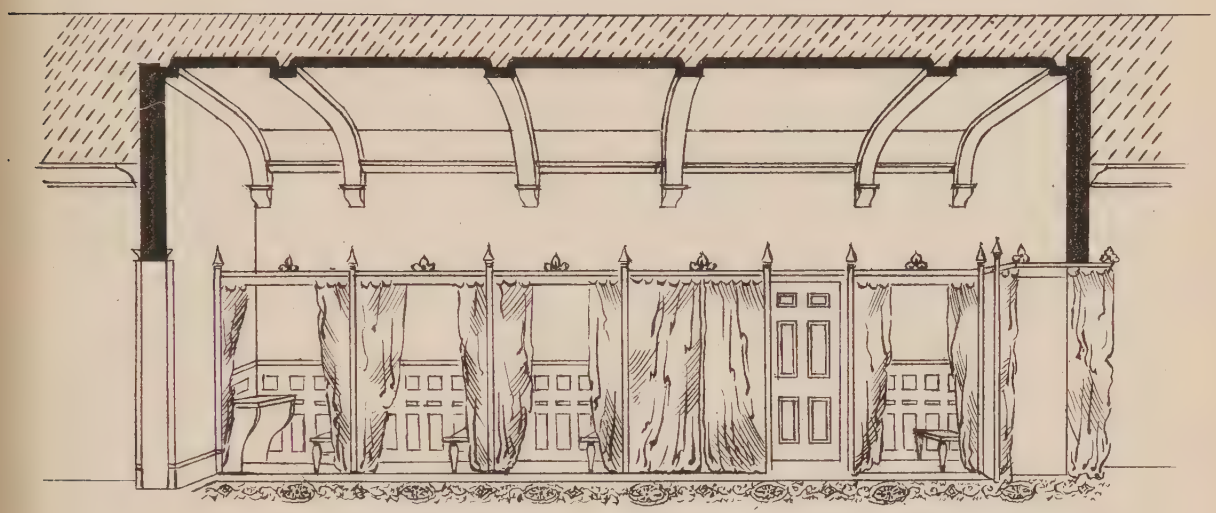
Nearly fifteen years ago Dr. Kitching, on his retirement from the duties of Superintendent of the York Retreat, after twenty-five years of devoted service, wrote for the guidance of the Committee and myself a paper containing many excellent suggestions for the improvement of the Institution he loved so well.

One of these suggestions was that a Turkish bath would, in his opinion, be exceedingly useful in the treatment of many of the patients sent to the Retreat. With this opinion the Committee and I fully united. Accordingly I was appointed to visit the principal Turkish baths in England, and,

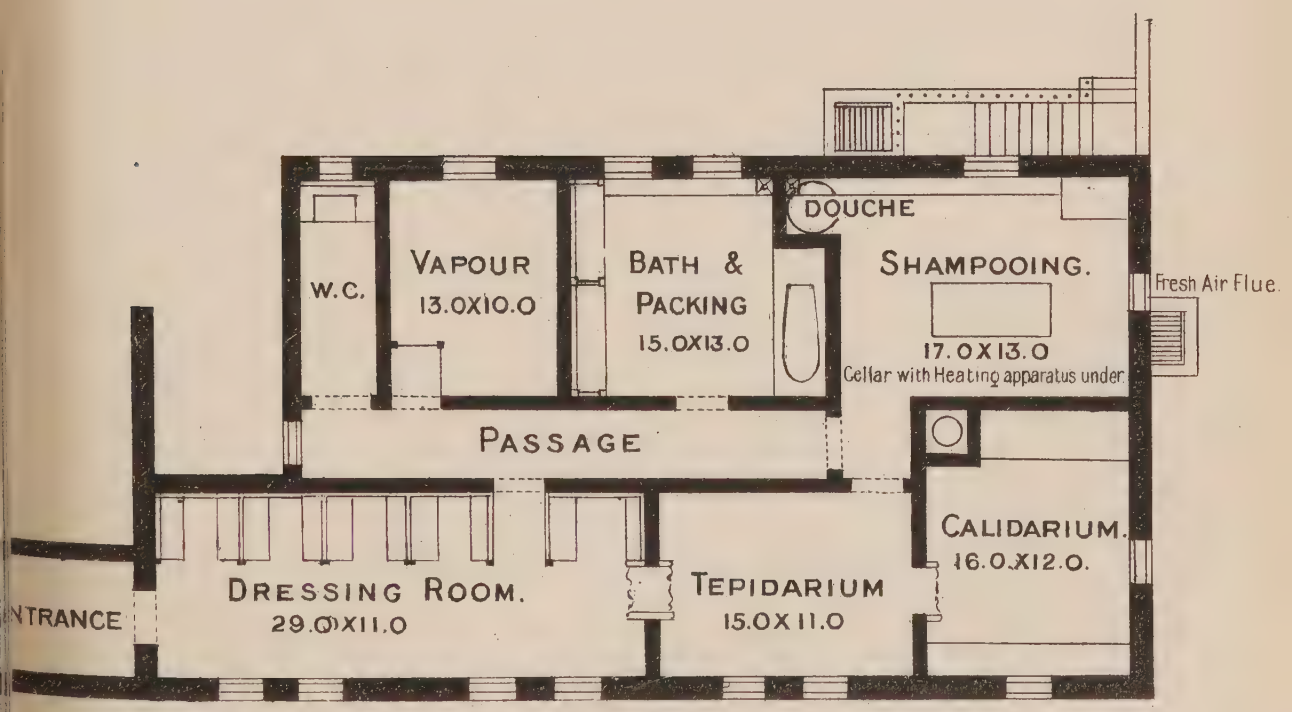
* Paper read at the Quarterly Meeting of the Association held at York March, 1889.

THE RETREAT, YORK.

TURKISH BATH BUILDINGS.



SECTION THROUGH DRESSING ROOM.



PLAN.

To illustrate Dr. Baker's Article.

E. TAYLOR,
ARCHITECT, YORK.

in conjunction with Mr. Edward Taylor, the Retreat Architect, to prepare plans for the approval of the Committee for the erection of a Turkish bath at the Retreat, the total outlay not to exceed the sum of £1,400, including heating apparatus, baths, and furnishing.

The result in due course was the erection at the Retreat of a carefully-arranged series of Turkish baths. These baths have now stood the test of daily experience for the past ten years. It has been usual to keep the temperature of the tepidarium at 120° to 130°, and of the calidarium at 130° to 180°.

The shampooing room is fitted with all modern facilities for hydro-therapeutic treatment, such as shower, douche, spray, and Russian vapour baths. Several of the male and female attendants employed on our regular staff have been trained to become skilful bath attendants.

The cost of heating the baths varies from 9s. to 11s. per week, and as the person in charge of the heating of the baths is also a regular *employé* of the Institution, it will be seen that beyond the interest on the £1,400 originally expended the cost of working these baths is small, and even that is met to a considerable extent by not infrequent visits from some of the citizens of York, to whom the Committee have consented to allow, under certain necessary restrictions, the use of their baths.

I propose this afternoon to speak briefly of my ten years' experience of these baths in the treatment of the patients that have been during this period under my care.

I would speak first of the use of the Turkish bath in the treatment of the insane as a curative agent, and secondly as a palliative agent.

(1st.) As a curative agent.

(A.) In the various forms of alcoholic insanity. It is self-evident that the power of elimination of noxious or poisonous matter possessed by the use of the Turkish bath must make it an almost invaluable agent in the treatment of mania é potu, and of the various allied types of mental disorder induced by inebriety.

I do not wish to undervalue the use of drugs in the treatment of the various forms of alcoholic insanity, but I have been so pleased with the power of charming away the condition of irritability and suspicion, so generally seen in these cases, by the frequent use of the Turkish bath that I would wish very decidedly to commend it to your notice.

This recommendation applies also to those cases of mental ill-health fostered by the abuse of morphia, chloral, and other narcotics, and would apply, I believe, to those recorded cases of mania, almost simulating the early phase of general paralysis of the insane, caused by lead-poisoning, generally induced by the use of hair lotion saturated with lead.

(B.) The Turkish bath is, in my opinion, markedly useful in those cases of apparent partial dementia which are not unfrequently seen in men *of middle or advancing life,* who are generally of a gouty diathesis. They are cases which present the appearance of premature senility where the excreting organs are found to be doing their work defectively.

By the use of the Turkish bath the deleterious materials circulating in the blood are steadily and surely excreted by the skin, the kidneys being to a large extent relieved of their work, and so gaining a temporary rest, which enables them in due course to perform their work again satisfactorily. I regret that I am precluded from referring to special cases, but I am at liberty to say that I have seen some persons whose mental powers seemed to be steadily failing, enabled to return with all their former power to the service of their homes and of their country.

(C.) The power possessed by the Turkish bath of relieving congestion of the internal organs causes it to be not infrequently useful in the treatment of those forms of melancholia which are accompanied by a dry skin and by a disordered and congested condition of the liver.

Far be it from me to imply that the use of the Turkish bath will invariably cure these cases. All I wish to say is that in some cases I have thought it to be a useful adjunct to the use of other remedies.

I can most fully support that which was, I believe, first recorded by Dr. Lockhart Robertson, namely, how often these cases of melancholia treated by the Turkish bath cease to continue to emaciate, and how month by month they steadily increase in weight.

(D.) As a curative agent in the treatment of puerperal insanity.

I suppose that we all believe that puerperal insanity is frequently caused by the retention in the blood of morbid material which should have been eliminated. Hence it occurs as a natural suggestion that the Turkish bath should here again afford a helpful means of treatment.

I am, of course, aware that most cases of puerperal insanity recover under usual treatment. That, indeed, this form of insanity, though often exceedingly troublesome, is generally looked upon by asylum physicians as likely to give some added grace to their mournful statistical records. I have only to state that in several cases I believe I have found the use of the Turkish bath to be the useful supplement to other modes of treatment, and that probably it has assisted in expediting some recoveries.

We now pass on to consider the palliative power of the Turkish bath in lunacy practice.

(A.) In the treatment of epileptic insanity. No class of cases are more troublesome in an asylum than epileptic lunatics, especially during the phase of restless excitement preceding and succeeding a fit. These cases are always giving trouble owing to their wanting to do something. Hence they resort to most objectionable practices, earnestly assuring you that their own treatment has done them a world of good.

In these cases I have found the use of the Turkish bath very helpful. It soothes their irritability, and it gives them something to do. I assure you that many of my epileptic patients are so fond of their bath that it has become a moral factor in our household, for I know that not infrequently the attendants induce certain patients to exercise all their power of self-control by saying, "If you behave that way, the doctors will forbid you having a Turkish bath this week."

I have been much struck on the few occasions when the baths have been under repair at the chorus of unanimous, indignant complaint with which these epileptics have assailed me in going my rounds.

(B.) In cases of general paralysis of the insane. I have noticed with extending experience the soothing and calming influence of the careful use of the Turkish bath in cases of general paralysis.

Many of these patients in the first stage are, as you know, so boastful, so irritable, and so ever ready to be actively vindictive that consummate tact is required for their peaceful treatment.

In these cases, of a surety, a good attendant can manifest that the power of adaptability is often a more useful gift in an asylum even than that of ability. These patients thoroughly enjoy the luxurious sense of ease that a bath affords, and they are gratified at being for a couple of hours

the sole recipients of the close personal attention of their bath attendant.

(C.) As a palliative in the treatment of the chronic insane.

(*a.*) In giving a means of occupation. All persons who have had experience in asylum life must have been sadly struck with the sight of the monotony of the lives of the chronic insane; but a small proportion of these can be induced to work or occupy themselves in any way. Anything that relieves the listless monotony of these weary lives must be useful, and, therefore, I increasingly value the use of the Turkish bath as a means of healthy occupation.

(*b.*) Essay upon essay has been written upon the peculiar odour which is said to appertain to the insane. If these had not been written in all seriousness by able and conscientious men one would marvel exceedingly at such an apparent waste of power. But I have no hesitation in saying that the free and frequent use of the Turkish bath will cause all these nauseous and peculiar odours to become wholly unrecognizable, for it affords, far beyond the ordinary warm-bath, a more perfect means of keeping our patients in a thoroughly cleansed and healthy condition.

These, then, are very briefly some of the reasons why I recommend to your very favourable consideration the use of the Turkish bath in the treatment of the insane. I would fain linger a few moments longer to speak of its usefulness in sustaining a healthy condition of mind and body in those who believe it to be their duty to devote their lives to the attempt to minister to the insane.

I assume that nearly all of us who have lived many consecutive years in a large asylum have met with not a few cases where members of our staff, owing to their constant intercourse with the insane, and the inevitable anxieties and worries of their daily lives, have shown signs of more or less marked mental ill-health.

I have seen several such instances during the past seventeen years, but since our attendants and nurses have been allowed the free use of the Turkish bath only one such case has come under my notice.

But if the Turkish bath is of use in promoting the health of the staff of an asylum, how much more so should it be expected to be beneficial to the medical officers whose duty it is to bear the burden and heat of the day.

It is sad to think how year by year so many of our col-

leagues withdraw from our specialty, realizing that the mental strain is greater than they can bear with impunity.

Probably it is true of most of us who have spent the best years of our lives in asylum work that we have consciously realized that from time to time we are liable to periods of sleeplessness, and of some degree of more or less profound mental depression. Into our lives periodically there comes a time when, owing to over mental strain, everything seems to go wrong with us.

Then for a time we lose the consciousness of that sustaining solace, which is usually the great happiness of our lives to realize, namely, the knowledge that our labour for the good of others is measurably successful, and that each day many eyes "mark our coming, and grow brighter when we come."

I believe that for this condition of unhealthy over-anxiousness there is no surer or readier remedy than the occasional use of the Turkish bath. It takes us for a time out of the desert of lunacy, it gives us the all-needful change and rest we need, it enforces cessation of all work, it takes us out of contact with our many causes of irritation, and it soothes and solaces us when weary and careworn.

In conclusion, my wish is that you may carry away two thoughts: first, that I *believe* that the Turkish bath will probably assist you in promoting the recovery of some of your patients; and, second, that I *know*, and *am sure*, that by its judicious use you may infuse additional happiness, solace, and brightness into the lives of some of those whom we know to be amongst the most sorely-tried of the members of the family of "suffering, sad humanity."

Notes on the Use of Sulphonal. By W. R. Watson, L.R.C.P., Edin. Govan Parochial Asylum, Glasgow.

Judging by the numerous reports that have already appeared, this drug seems to be attracting considerable attention, and to us who are engaged in the treatment of insanity it has a special interest. During the past three months I have made a number of experiments, with results confirmatory of the favourable notices which have hitherto been published.

I venture to lay these observations before the Association as a slight contribution to the materials necessary for a correct estimation of the therapeutic properties of this substance. As its preparation and chemical constitution

have been repeatedly described, it will be unnecessary to make any reference to them here.

The experiments were made upon 36 patients under my care, either in the Asylum or the Parochial Hospital, including cases of epilepsy with dementia, epilepsy with mania, melancholia, dementia, senile dementia, chronic mania, general paralysis, hemiplegia, strumous disease of joints, varicose ulcers of the leg, epithelioma, cardiac disease, and chronic rheumatic arthritis.

In 31 cases (86·1 per cent.) the results were very satisfactory. This may best be illustrated by brief details of a few cases :—

Case I.—J. S., male, age 53. Epileptic mania, sleepless, excited, and noisy, and had been so for some days. At ten p.m. he was ordered 20 grains of sulphonal; by two a.m. he had become quiet and drowsy and slept soundly till eight. On two subsequent occasions 25 grains were given with very satisfactory results.

Case II.—J. H., male, age 55. Melancholia with hallucinations of hearing; had passed several sleepless nights, shouting and talking loudly in answer to imaginary voices. He was ordered 25 grains of sulphonal; after an interval of two hours he fell asleep, and this continued unbroken for eight hours. Ten days after he was ordered 30 grains and slept the whole night.

Case III.—A. O'B., female, aged 21. Epileptic mania, very restless, would not remain in bed, noisy and violent. Temperature 102°. At eight p.m. she was ordered 30 grains of sulphonal; fell asleep at eleven and continued to sleep till eight a.m., when she awoke quiet and docile. Temperature normal. The excitement recurring, the same experience was repeated two nights afterwards.

Case IV.—J. M., male, aged 70. Admitted to hospital suffering from hemiplegia of some months' standing. His friends were in comfortable circumstances, but as he was obstinate, taking very little food, and had a pronounced alcohol habit, it was difficult to manage him at home. For the first two nights he slept very little, was talkative and made liberal demands for whiskey. As there were good reasons for supposing that he would refuse any medicine to cause sleep, a 30 grain dose of sulphonal was mixed with porridge he had for supper, and from this he obtained eleven hours of refreshing sleep. The sulphonal was repeated three nights afterwards with a like result. The whiskey meanwhile being reduced to one fourth, his appetite increased considerably, and he left the hospital after a residence of thirteen days decidedly improved.

Case V.—M. A., female, aged 41. Strumous disease of elbow joint; much reduced by pain, want of sleep, and profuse discharge. She was ordered 30 grains of sulphonal, which gave decided relief, and after a time she had nearly three hours of unbroken sleep.

Case VI.—M. D., female, aged 66. Varicose ulcers of the leg, from which she suffered great pain, depriving her of sleep. A 30 grain dose of sulphonal gave marked relief for five hours and a sound sleep for upwards of two hours.

Case VII.—E. D., female, aged 67. Hemiplegia with pain in the arm and more especially the leg of the affected side, sufficiently acute to interfere very much with sleep. She was ordered 30 grains of sulphonal in the evening. This greatly relieved the pain and kept her drowsy during the night. The following day and night she slept nearly continuously, being roused at intervals for meals. Results somewhat similar, but considerably less marked, followed the administration of the drug on two subsequent occasions.

These cases suffice to show the influence of the drug; it would be needless to multiply instances where it has been equally efficacious.

In two cases (5·5 per cent.) a partial success only was obtained. The patients, one the subject of general paralysis, the other of chronic mania, had for a number of nights been restless, talkative, and noisy.

Under the influence of sulphonal they became quieter, although they had no prolonged sleep, and this improved condition lasted during the night. Similar effects followed a repetition of the trials.

The results were absolutely negative in three cases (8·3 per cent.).

Case VIII.—H. C., female, age 56. Epilepsy with dementia, very noisy, sometimes screaming the whole night. She was ordered 30 grains of sulphonal in the evening, and the dose was repeated in the morning without producing the slightest effect. Paraldehyde had previously been tried in large doses. A transient quietness followed the administration of 3 drams, but to procure a sound sleep of some hours even this dose had to be repeated.

Case IX.—J. T., female, aged 73. Senile dementia, sleepless, with incessant desire to get out of bed and move about. Sulphonal had no effect, and paraldehyde in doses as large as those mentioned in the last case was equally powerless in causing sleep.

Case X.—E. K., female, aged 62. Epithelioma, suffered great pain, and sleep was obtained by the occasional use of morphia given hypodermically, or Battley's solution of opium in full doses. Sulphonal had no influence either in relieving pain or inducing sleep.

In such of the articles upon sulphonal as have come under my notice, I find but scanty reference to it as a remedy for the relief of pain. But undoubtedly this result was obtained

in several of the cases to which I have already referred where pain was a prominent symptom. The first effect of the drug was a gradual cessation of pain, and after a period of variable length, sleep came on. In Cases V. and VI. the analgesic effect was much more pronounced than the hypnotic, sleep in both cases being of but short duration. In Case VII. there was a marked relief of pain, followed by drowsiness, and it was not until the next day that the patient had sound, refreshing sleep. To these I have to add two cases of chronic rheumatic arthritis, where very decided benefit followed the administration of 30 grains of sulphonal. The dose was given at night, and one of the patients especially expressed herself as feeling more comfortable than she had been for a long time. Towards morning sleep came on, and a feeling of drowsy comfort continued during the following day.

From these few instances one could not certainly say that sulphonal is a trustworthy analgesic, but I hope enough has been shown to encourage further trials in this direction.

Although sulphonal is nearly tasteless, it is, owing to its insolubility, not always easy of administration. If the patient is docile, a convenient way is to give it in wafer paper, or it may be suspended in water, having previously moistened the powder with a few drops of alcohol. Where it is necessary to deceive the patient, it can be put into his food, as in Case IV., or if he is refractory and refusing food altogether, it may be suspended in a thin custard and given by the œsophageal tube and "Yellowlees' bottle."

When an average dose (30 grains) of sulphonal was given, sleep came on in the successful cases in a period varying from thirty minutes to four hours; the average being rather under two hours. The duration of the sleep obtained varied from two to eleven hours, average about seven and half hours.

In a number of instances the effects continued much longer, that is, there was a feeling of sleepiness the following day, and occasionally sound sleep was obtained the following night.

The respiration, pulse, and digestion seemed unaffected, and no bad after effects were observed.

From these limited observations I am inclined to believe that we have in sulphonal a valuable remedy for insomnia—possibly also an analgesic of some value—and its present comparatively moderate price brings it within the list of ordinarily accessible remedies.

In these trials of sulphonal I used that manufactured by Bayer, of Elberfeld (Sulfonal-Bayer), one of the makers who guarantee the purity of the drug.

Since the foregoing was written I have, by the kindness of Dr. Conolly Norman, of Dublin, received a copy of his paper upon the same subject, read at the Quarterly Meeting of the Association held in that city in November last, and I am gratified to find that the results I obtained correspond so closely with those he has published.

CLINICAL NOTES AND CASES.

Case of Attempted Suicide. By Dr. Urquhart, Murray's Royal Asylum, Perth.

The following case presents unusual features of interest, and is placed on record towards a better understanding of these unexpected developments in patients apparently more careful to save their lives than to destroy them. I trust that it is not too sanguine to express the hope that the physician may yet arise who will show us a more excellent way of determining the suicidal tendency than we at present possess.

During the nine years of my service in Perth Royal Asylum we have had no fatal accident of this nature, but several very determined attempts have been made. Among these was a particularly difficult patient, who was transferred to Dr. Turnbull's care after several months passed with us in the constant endeavour to put an end to her existence by swallowing every possible material, by strangling, by suffocation, etc., etc. But in such a case the precautions taken and the obvious responsibility laid on the staff eventuated in the prolongation of life until a pneumonia carried her off. It seems to me that, however great may be our difficulties in dealing with patients of pronounced suicidal tendency, the *indications* of treatment at least are simple enough as far as regards the constant care that must be provided. The case to which I would specially refer to-day, belonging to a group with which we are only too fatally familiar, presents difficulties apparently insurmountable, and adds to the responsibilities of asylum life a horror that requires all our philosophy to combat.

R. H., a voluntary patient, admitted into James Murray's Royal Asylum on the 29th September, 1883. A married merchant, æt. 59, of good education. His father was "melancholic," and his mother died of "softening of the brain." He had been unfortunate in business, and had much domestic trouble. R. H. engaged in several different kinds of business, and was unsuccessful in all, having lost a considerable amount of money. He also suffered from domestic worries.

He was reported to have had four attacks of depression—two before marriage, and two after marriage. On the 11th April, 1883, six months previous to his admission to Perth Royal Asylum, he found it necessary to become a voluntary patient in the Glasgow Royal Asylum. Dr. Yellowlees kindly supplied me with the following extract from his Case Books:—

"Admitted 11th April, 1883.

"Came to the asylum himself and alone, and was admitted as a voluntary patient into the West House. He is married and a Protestant.

"Says that for two years past he has felt nervous and sleepless, could not depend on himself, and could not face society. He has so little confidence in himself as to require an attendant with him. Felt he was getting worse, and was compelled to come here for relief.

"He is shaky and nervous, easily agitated, and low in spirits. Bodily health rather indifferent, tongue slightly furred; is spare in body—says he is falling off.

"September 29th, 1883. Left to-day, having given the usual three days' notice.

"Relieved."

On the same day he travelled to Perth, accompanied by his wife, and at once detailed the circumstances of his case in the fashion usual with hypochondriacs. He proclaimed his misery, inability to think continuously, or to carry on his business. He appeared very nervous and excitable, and complained of continuous pain in the head. There was no apparent bodily disease, and he was in good physical condition.

For a couple of years Mr. H. continued much in the same state. There is no note of interest in our books until 10th February, 1886, when he began to state that he was the "victim of progressive sclerosis of nervous matter." He then began to wear a wet handkerchief on his head from time to time, saying it had a calmative effect on the brain. Towards the end of the same year he ceased to open any business letters, said that he must have no worry as to the settlement of his affairs, and in consequence of the dead-lock that ensued it became necessary to appoint a *curator bonis*. On his arrival here he had presented me with a copy of a medical certificate which he had obtained in Glasgow. It set forth that he was not a lunatic, and that he was merely suffering

from *depression.* When the law agent requested certificates for the appointment of *curator bonis*, I thought it best to have outside opinion. Drs. Stirling and Bramwell, of Perth, thereupon stated that he was incompetent to manage his own affairs, being of unsound mind, and the court relieved him from further trouble in this respect.

In 1887 it was noted that towards the end of each quarter he showed signs of depression, and made some manifestation of insanity, and in time these quarterly exacerbations came to be looked for. He would ask for a blister to be placed on his neck, or request extra and sustaining food to ward off the progress of his disease, or insist upon electrical diagnosis of the "sclerosis," or foretell his early death. These symptoms were set down as his demonstration of inability to resume his place in the world; for as soon as the new quarter had been entered on, and he was assured of another three months in safety and quiet, the manifestations forthwith ceased. He was jocular and bright, an ardent politician, full of interest in his companions and surroundings. There was nothing done about the asylum that he did not ascertain and discuss, and he was a most valuable check on the attendants and servants who abused their trust in any way. He would never, of course, admit that his hypochondriacal fancies were incorrect, and could always be led to talk of his early decease; but his regular habits of life and quiet enjoyment of the world were patent to all. Once he foretold the impossibility of his living for another month, and promised that he would say no more on that subject should be live till Christmas—a very much longer period. On being reminded of this promise he freely admitted that he had taken too gloomy a view and never again pinned his statements to a date. He was always on full parole, but never went out beyond the grounds, as he had many old friends in our neighbourhood whom he did not wish to meet. In the morning he would be in the garden, chatting with those employed there, and in the afternoon in the billiard room. In the evening he did not retire to rest till 10 p.m., when he went to bed in a single room, where he never was visited during the night.

He was always much annoyed after his wife's visits, when the conversation was mostly about his money matters and the necessity of his return home. In 1887 he made a complaint that she had been insulted by the assistant medical officer and matron looking into the visiting room while his wife and he were talking together. The occasion was quite inadequate to the fuss he made about it, by letter and personal complaint, and we translated it to mean an excuse for his wife discontinuing her visits. At any rate he did not speak to the assistant medical officer for five months and repeatedly complained to me of the "fearful outrage."

But with all these ebullitions, there never seemed to be sufficient cause to restrict the freedom he had enjoyed for so many years,

nor to place him under certificates as an ordinary patient. When I last saw him, before leaving on a fortnight's holiday, he was bright and cheerful, full of talk about the affairs of the house, and apparently the last man to put an end to his life.

On the evening of the 23rd September he retired to rest as usual. The head attendant had a long talk with him and can recall nothing unusual even now on looking back on the conversation. The assistant medical officer also had a chat with him and found him interested in the affairs of the day, as on many previous occasions. In the morning he was found to have inflicted a series of wounds on his person, none of them deadly, but some of them attended by very considerable bleeding—estimated at not more than thirty ounces. These wounds were such as might have been caused by a pointed piece of glass, and are now described :—

1. Transverse cut over the hyoid bone, 2 inches long and $\frac{1}{2}$ inch deep. Edges ragged, shape fusiform, with several scratches in the neighbourhood.

2. Cut over left median cephalic vein, about 2 inches long and $\frac{3}{4}$ inch deep. The edges were very ragged, and it had evidently been much hacked at. The vein was not injured, nor were the underlying structures disturbed.

3. Cuts over middle of left forearm—quite superficial and of no great moment.

4. Skin-deep cuts, three in number, over the inner side of the right leg.

5. Deep three-cornered wound on middle of left leg—about $1\frac{1}{4}$ inches deep. It had evidently been torn by many incisions, like the other injuries, but lay behind the internal saphenous vein. Both legs were varicose, and the bleeding had evidently been abundant from this last wound.

When the charge-attendant got up in the morning he found Mr. R. H. lying on a sofa in the day-room and his room floor covered with blood. He at once sent for aid, and on examining him he was found to be pallid, and the cervical wound did not account for the amount of blood lost. His clothes were removed and the other wounds were discovered seriatim and dressed. The hæmorrhage had entirely stopped, except for a small arterial twig in the arm, which started afresh when being bound up.

The room was bespattered with bloody footmarks, and pools of blood were on the floor. The ewer, with a bloody sponge, was filled with bloody water, and he had apparently consulted the mirror from time to time. He had evidently not attempted to go to bed. His bedroom door not being locked, he could move about the gallery, and from the presence of a few drops of blood on the staircase and water closet lobby, it was evident that he had made full use of his liberty. But the visit to the staircase was to all appearance quite aimless, whereas he stated that he had put the lethal weapon down the closet.

When seen by the assistant medical officer he was pallid, and somewhat faint. The pulse was rapid and feeble, and he seemed to be remorseful. He begged them not to let anybody know about it, and refused very decidedly to give any information about his wounds, but kept saying "Poor Doctor." Otherwise, he could move about freely and was much as usual. Indeed, he was able to walk downstairs to the infirmary without aid—a considerable distance—as it was thought better to remove him from the convalescent ward, where he had been. He was ordered a little brandy and egg, and on partaking of it he spat up some clots of blood. At that time he denied having done anything to cause this, but merely said that he had made the cuts with an old knife—"quite blunt, which he had got when out." He stated that he had put it down the water closet, but though immediate search was made in the various traps nothing could be found to support his statement.

At that time he was under no apprehension of death, and seemed much ashamed of his position. The bloody sputa continued, and a rattling noise in the throat became audible. On applying the stethoscope, gurgling noises were heard in the left lung and dulness was ascertained. On pressure he said that he had poked a piece of stick down his throat; some six inches of walking-stick roughly broken off had previously been found in his pocket. No mark or wound of the throat was discovered, and no evidence of the stick so being used was forthcoming. The sounds gave the impression of fluid being in the lung, and the supposition that he had caused some internal injury seemed most tenable. Dr. Stirling, of Perth, concurred in this view.

The sputa now became tenacious and rusty; pulse 80, resp. 30, temp. 100. Face flushed and hot. Tracheal sounds very loud. Speech indistinct and produced on great effort. A hypodermic injection of ergotin ($\frac{1}{100}$ gr.) was administered and ice applied to the throat. Brandy, eggs, and beef-tea in small quantity were frequently given.

In the afternoon the pulse had now fallen to 76, resp. 33, temp. 102°. Sputa less abundant. Tracheal sound as before. A tent was formed and turpentine steam injected.

At 11 p.m.	Temp. 100	Pulse 98	Resp. 32
„ 2 a.m.	„ 100	„ 102	„ 42
„ 5 a.m.	„ 101·5	„ 112	„ 46
„ 8 a.m.	„ 102	„ ?	„ 44

He was then pale and collapsed, and the pulse could not be counted. He was somewhat irritable, and seemed as if he desired to recover. Towards afternoon his pulse continued to flicker, the extremities grew cold, and the breathing more distressed. Sometimes he was conscious, but at other times he wandered and sank rapidly in spite of ether injections, etc. At 10 p.m. he suddenly rose up and fell back dead.

On the arrival of his wife, for the first time we learnt that he

had threatened suicide previous to his admission to Gartnavel, having spoken of throwing himself out of window. But neither the case-books nor my own recollection indicate the slightest hint of such a statement.

The post-mortem examination was conducted by Dr R. de Bruce Trotter.

Brain large and well developed. Dura mater adherent on vertex. Pia mater opaque in this neighbourhood.

Larynx normal. Epiglottis injected and very slightly swollen. Pharynx inflamed. Œsophagus normal. Not the slightest abrasion or wound could be discerned in these parts.

Trachea and bronchi injected. Both contained purulent matter. He had been subject to winter cough, and always spoke with a husky indistinct voice.

Left lung emphysematous in front and congested behind.

Right lung firmly adherent to diaphragm and mediastinum. Two-thirds of its volume was solid, like a rounded indefinite ball in the centre of the lung. On section a purulent liquid mixed with air escaped. The colour was dark red, and the mass seemed on the point of total disorganization.

Heart loaded with fat. Walls extremely thin, flabby, and collapsed. Fibrinous clots in aorta and right auricle.

Stomach empty—omentum loaded with fat.

Liver small.

Kidneys healthy.

Rigidity and hypostasis well marked. There was a large amount of blood in all parts of the body and the general appearance indicated vigour of bodily functions and a very well nourished body.

Microscopic sections of the lungs showed many pus-cells and inflammatory products. At one point a lymphatic gland showed a ruptured capillary vessel.

I formed the conclusion that death was due to the inflamed and suppurating lungs, and not to the wounds and hæmorrhage. In that opinion the medical men in charge of the case and post-mortem coincided. I believe that the pneumonia was the primary cause of the fatal termination—that Mr. R. H. was seized with that disease, and that the systemic disorder consequent on that malady, together with the recurrence of an habitual period of anxiety (*not* to be sent out), caused him to inflict the injuries described. That he designed to make a show of suicidal intention there can be no doubt, for he left a letter to his wife and another to me underneath his pillow. He put down the cause of his self-destruction as the "insult" offered to his wife. An insult to himself he might forgive, but to his wife,

never. He also left a codicil to his will leaving the attendants small legacies, and a note stating that an incision at the back of his neck would reveal the cause of his troubles. These letters were absolutely the first indication we had of any suicidal intention, and were, of course, only discovered after the fact.

Tumour of the Pituitary Body. By James B. Whitwell, M.B., Assistant Medical Officer, South Yorkshire Asylum, Sheffield.

As neoplastic growths in connection with the pituitary body are decidedly rare, and as their presence is not unfrequently associated with and characterized by exceedingly vague, and, in some cases, inexplicable symptoms, the following case may be of some interest and value, more especially as the psychical derangements brought about by intracranial tumours in various regions are at present by no means definite and clear :—

The patient was a married female, E. M., æt. 30. She was admitted into the South Yorkshire Asylum on June 18, 1888, on certificates which indicated that she was depressed, anxious, and incoherent, and had hallucinations of sight and hearing, and delusions. This was her first attack of mental disease, and it had been in progress for a period of about three weeks. She had during that time shown no suicidal tendency, and had had no fits of any kind, and she was attentive to the calls of nature. As regards her personal and family history, she had apparently been quite healthy, mentally, up to three weeks previous to admission; but, bodily, had been in poor health for some months; also having been in somewhat reduced circumstances on account of her husband being out of work. She had, for an unascertainable period of time, suffered from headache, which she says was worse at the time she was pregnant. She has had seven pregnancies altogether, and has now five children living, her second and fourth pregnancies not reaching full time, but no further details could be ascertained on this head. She has suckled all her children, and her last baby was born in February, 1887, and was weaned six months prior to admission, menstruation not having occurred since. Her mother has been in an asylum for ten years. Herself and all her relatives have "liked beer," but to what extent their desire has been indulged cannot be ascertained. No phthisical, malignant, nor syphilitic history obtainable.

On admission.—She was found to be a woman rather below the

average height, of dark complexion, of fairly good build, and decidedly pale, nutrition being also below normal. Her expression was heavy, and rather apathetic, and her general appearance gave the idea of being "run down" in bodily health.

Physical examination revealed no special abnormality. Pulse of fair volume, but low tension, and easily compressible, but perfect rhythm. Arterial wall normal. No murmur audible on auscultation, but first sound not very strong.

Respiratory system, normal.

Alimentary system.—Lips pale, teeth good, and show no signs of syphilis. Tongue furred thickly, steady; appetite poor, and she required much coaxing to take food. Bowels tend to constipation; no abnormal dulness detected over abdomen.

Genitory-urinary system.—Catamenia suppressed. Urine of low specific gravity, but was otherwise normal.

Mental condition.—Patient is very quiet and sits about, preferably away from others, doing nothing either of her own accord or when urged to. When spoken to she looks at her questioner in a blank, almost expressionless manner, and does not appear to be able to concentrate her mind sufficiently to be able to answer even in the most simple manner, except the most terse and pointed questions, such as her name, number of children, etc.; each answer being delivered in a slow, dreamy, weary manner. There is no defect of articulation, however. When left to herself she sometimes reiterates in a low tone, "It's me that's lost;" "It's where my mother's been," the latter sentence appearing, perhaps, to have reference to her mother's asylum life. She is unable to say where she is now, how long she has been here, etc.

June 26, 1888.—Patient continues in her condition of extreme mental depression; says she has been here two or three days; these things spoken in a low tone and in an almost automatic manner.

No special change occurred till July 21, when patient vomited in the morning after breakfast and complained of headache, which was pretty general, though especially bad on the right side of the head from the pterion forwards. This headache, she says, has been present for the last three days. Pupils equal, but the right does not react so well to light as the left; other reactions unimpaired.

July 22.—Vomiting continued, and was unrelieved by any treatment, and was evidently of cerebral origin, though no markedly local symptoms had presented themselves.

July 26.—This morning patient was dull and apathetic, and did not take much notice of what was said to her, and at about nine o'clock had a convulsive attack which lasted a few minutes, during which time (according to the nurse's account) the right side of the face and body were said to be chiefly affected, but the rest of the body also was convulsed in a lesser degree. A slight degree of

internal strabismus of the left eye was observable. At 12.30 of the same day patient was in a semi-comatose condition, respiration being slow and snoring, face flushed, especially the forehead and cheeks, and much fluid saliva was dribbling from the mouth. There was no appreciable strabismus of either eye, but the movements of the eyeballs to voluntary stimulus could not be made out. Both pupils are smaller than her anæmic condition would suggest, but they reacted to light as before noted. The right palpebral fissure was markedly larger than the left when the face was in a state of rest, and when the lids were made to close by rapid approximation of the hand the right lids closed more slowly and less perfectly than those of the left side. The muscular folds on the right side of the face were somewhat diminished, and the mouth was drawn slightly to the left. Both arms were in the position of extreme extension and pronation, the right arm being especially rigid. The left leg was tonically extended; right not so. Left knee-jerk very much exaggerated; right brisk; no ankle clonus. Both plantar reflexes very slight, especially the left. No phenomena elicited by percussion of the skull.

2.15 p.m.—Consciousness returning, and when told to put out her tongue does so, and it is protruded straight. The previously noted facial condition is much less marked, and she is continuously grinding her teeth. Pupils decidedly larger than on last note; reactions similar. Pulse of small volume and low tension; rate 50, regular. Plantar reflexes brisker than on last note, and both patellar reflexes are brisk. Both grasps feeble, but not much appreciable difference between them; temperature in axilla 98·4. Patient understands what is told her, but will, or can, only answer in monosyllables. The strabismus of the left eye is now again apparent, but still only slight.

6.30 p.m.—No facial paralysis, but still some slight internal strabismus. Movements on each side of the face are equal, and face pale, the previously-noted flushing being now quite absent. Pupils equal, and as last noted; complains of cold and shivers. Temperature in axilla normal; no appreciable difference in grasps; both patellar reflexes distinctly exaggerated. Both plantar well marked; pulse of small volume and low tension.

10.15 p.m.—Patient is sufficiently conscious to be able to answer simple questions, but is rather drowsy and irritable, not liking to be interfered with; no further rigor. Pupils equal, and react fairly well to light. Pulse 120, small, of higher tension, regular; temperature 102°. Both patellar reflexes practically absent; both plantar reflexes well marked.

July 27, 1888, 7.30 a.m.—Patient had convulsions this morning, which were reported as being of general distribution.

11 a.m.—Patient is sufficiently conscious to be able to understand some at least of what is said to her, but does not attempt to do much of what is told her. When asked to take hold of a hand

with one of her hands she moves the correct one a little, but not much more than to disengage it from the bed-clothes; but when a hand is put close to her she grasps it. No appreciable difference in the two grasps. Pupils medium size, equal, and react as before. Face appears normal, but on bringing about movement there is decidedly a greater degree of movement on the left side than on the right. Sensation is apparently perfect over the whole body and face. Both patellar reflexes present to normal extent; both plantar well marked; patient continuously grinds her teeth; pulse 120; temperature 98·6.

4 p.m.—Patient lies back in bed with her eyes rather more than semi-closed, and with eyes moving more or less in a horizontal plane backwards and forwards all the time. Respiration 28, snoring; face slightly flushed; both patellar reflexes absent; sensation apparently normal; both plantar reflexes slight; temperature 99·8.

Patient never rallied after this time, and after having another attack of general convulsions during the latter part of the evening died comatose.

At the post-mortem examination there were no points worthy of special notice in the examination of the brain itself, except that at first sight the site of lesion was far from being obvious. But on following the course of the left sixth nerve it was observed that the interclinoid membrane was slightly "bulged," though scarcely noticeable except on close examination. On opening this in the usual manner, the pituitary body was found tightly hedged into the sella turcica, causing considerable thinning of the sphenoidal portion of the posterior support, though not eroding it at any part. Outwards the tumour extended into the cavernous sinus on either side, more especially the left side, where it involved the internal carotid artery of that side, with the result that its walls were weakened by the growth and its calibre rather dilated. Also involved on this side was the sixth nerve, which was intimately associated with the growth in the same way, and undoubtedly had its functional integrity interfered with as in the case of the tunics forming the arterial wall. No other nerve was in any way involved in the growth, and although the tendency was in the same direction, on the right side the nerve and artery were merely in contact with the growth and not in organic continuity, as on the left side. The whole tumour in its long diameter measured 2·9 ctm. as against 1·3 ctm., the usual measurement of a normal pituitary; it was of a soft semi-gelatinous consistence and contained no hæmorrhage. Microscopically it presented all the features of a myxosarcoma of not very rapid growth. The diagnosis of a coarse lesion in this case was scarcely possible until the patient had been for some time under observation.

On account of the fact that the headache of which the

patient complained is a sufficiently common condition, in the class of cases to which post-lactational melancholia belongs, as to scarcely attract special attention until the subsequent vomiting of a cerebral type considered together with the pupil reactions and mental condition, immediately led to the probability of such a condition being present, in spite of the persistent absence of definite focal symptoms. The fact that the headache was more marked during pregnancy pointed rather to a vascular increase of the tumour consequent on the hypertrophied heart and increased blood pressure known to occur in that condition. Never, however, was there any intracranially-developed bruit audible on cranial auscultation. The early implication, though transient, of the sixth nerve would naturally suggest lesion beneath the tentorium, but the affection of one of these nerves only, almost demanded a unilateral lesion, though the exact position in its course was certainly somewhat difficult to decide, the absence of conjugate deviation with the other eye excluded lesion of the positive nucleus, while absence of definite lesions of other nerves seemed to exclude a lesion in the course of the sixth anterior to the posterior clinoid process. At the same time, however, the occurrence of general tetanic rigidity without very definite paralysis other than the sixth was still in favour of an affection of this nerve in the portion of its course beneath the tentorium. The profuse salivation observed also, taken with the lesion of the sixth, rather pointed to some affection in the region of the fifth, since Claude Bernard produced increased flow of saliva by puncture of the floor of the fourth ventricle behind the origin of the fifth, and increased secretion of saliva in neuralgia of the fifth not unfrequently occurs reflexly through the chorda tympani, and the peculiarly persistent grinding of the teeth so frequently observed in the late stages of general paralysis certainly tended to suggest some irritative lesion in connection with the motor part of the fifth nerve. No other focal symptoms occurred which were available to localize the exact point of interruption in the course of the sixth nerve. This case also indicates the absolute unreliability of pain in the head as a localizing symptom, its point of greatest intensity and constancy being in this case considerably removed from the site of lesion. The mental condition of the patient was interesting as being fairly typical of the early psychical symptoms in a certain class of cerebral tumours, the mental disposition

being altered, the patient being melancholy, lachrymose, and sometimes cross; also silent and anergic, with a tendency to withdraw from any source of mental stimulation. Her power of attention was deficient, and her memory weakened, through inability to fix new mental impressions or to reproduce and combine previous ones, and her cognition of her surroundings was imperfect and hazy.

It is also interesting to observe that "acromegaly," a condition which has occurred in two of the recorded cases of so-called "hypertrophy" of the pituitary body, was absent in this case, though the relation which this peculiar condition really bears to the pituitary body is exceedingly doubtful, more especially as Fraentzel* has recently recorded a case in which this condition attained a high degree, still without any abnormal condition of the hypophysis cerebri.

Cases of Insanity with interesting Pathological Conditions. By James Rorie, M.D., Medical Superintendent of the Dundee Asylum.

At the Quarterly Meeting of the Forfarshire Medical Association, held in Dundee on February 8th, 1889, Dr. Rorie submitted the usual quarterly Pathological Report of the Dundee Asylum, and exhibited specimens connected with the following cases:—

I. *Dissecting Aneurism of Thoracic and Abdominal Aorta.*

J. L., a male patient, transferred from another asylum, was admitted on 26th January, 1888. Although examination on admission revealed evidence of valvular cardiac disease, no symptoms of aneurism were detected. During his residence in the asylum patient had several fainting fits, but nothing otherwise occurred to arrest attention till a fortnight before death, when he got weaker and took to bed. On 26th January, having risen and been out of bed for a few hours, he suddenly fainted at 6.35 p.m., and never rallied, death taking place at 7 p.m.

On making post-mortem examination very extensive organic brain changes were found affecting the convolutions of left lobe, and on opening the thorax 44½ozs. of blood clot was found in left pleural cavity, evidently from rupture of a blood-vessel. On further examination the aorta was found surrounded by an aneurismal sac. In this sac was an opening, readily admitting the top of the finger, through which the blood had burst into the pleural cavity. On

* "Deutsch. Med. Wochensch.," 1888, 32, 651.

laying open the aorta opposite the opening an opening through the vessel was seen leading into the sac. The upper edge of this opening was abrupt, the lower edge also abrupt and running downwards and outwards. The inner and middle coats of the vessel were eroded two inches from the opening downwards, and to the right. The aneurismal sac extended upwards to the arch of the aorta, and on following the vessel downwards it was found that the blood had dissected its way along the whole course of that vessel and the inguinal arteries, stopping on the right side near Poupart's ligament, on the left at the origin of the profunda femoris artery.

Spinal curvature existed, the lower cervical and upper dorsal portion passing $1\frac{3}{4}$ inches to left, and lower dorsal and lumbar portion of the spine curving $1\frac{1}{4}$ inches to right of mesial line.

On the right side of body of sixth dorsal vertebra an exostosis was found just at the side of the arterial lesion, and is of interest as being probably connected with its origin.

II. *Caries of Cervical Vertebræ followed by Meningo-Myelitis.*

W. H., a male patient, was admitted in a state of acute mania on 6th December, 1865, and the disease assuming a chronic form he was transferred to the lunatic wards of the Dundee East Poorhouse on 3rd June, 1870. Being found unmanageable and troublesome from attempts at escape, he was returned to the asylum on 18th February, 1871, where he has remained, with but little change mentally, a very difficult and troublesome case till the spring of last year, when he was occasionally quieter for short periods. Nothing particular was observed till 10th August, 1888, when he complained of pain in neck, became very quiet, lying down on the seats and evidently suffering much; and, from being utterly incoherent in his language, became much more rational and connected in his talk. On examination, the neck was perceptibly swollen on right side posteriorly. Poultices were accordingly ordered to be applied. On 12th August the swelling in neck was softer and inflammation less. Patient was now able to sleep in sick-room—the first time he had been in a state to sleep in a room with other patients for many years. On 14th August swelling was harder, rather larger, but no great increase of temperature. In this state it remained till 23rd October, presenting many of the characteristics of a hard, cancerous tumour, when it began again to enlarge in size. Patient mentally relapsed into old state of chronic mania. On 12th November fluctuation was felt, and shortly afterwards the abscess was opened freely, and about a teacupful of matter came away, giving patient much relief. On 20th December another small abscess was discovered, 2 in. by $2\frac{1}{2}$ in., over angle of ninth left rib. On 24th December the abscess in neck was discharging freely, when patient's gait was observed unsteady, and also weakness of right arm supervened. On 1st

January, 1889, a general rise of temperature set in with acceleration of pulse to 120, weak. On 3rd January patient had great pain in neck and paralysis of whole body. Reflex action of spinal cord was normal, contraction of limbs occurring readily on tickling soles of feet. Temperature of body and pulse now continued steadily rising till 8th January, when at 2 p.m. temperature was 104·2°, and at 7 p.m., 106·2°; pulse, 148. Under the influence of salol, given every three hours in gr. v. doses, both fell, temperature on the 9th being 100·2°, and pulse, 112. Death occurred at 5 a.m. on 10th January, rectal temperature immediately after death reaching 110·2°.

The principal lesions found on post-mortem examination were extensive caries of the third cervical vertebra and inflammation of membranes and substance of spinal cord. When the latter was exposed opposite the third cervical vertebra it was found swollen for about $\frac{3}{4}$ in. upwards and 2 in. below this point, and a mass of inflammatory products adhering to the dura mater.

Myxœdema and its Insanity. By J. Cumming Mackenzie, M.B., Assistant Medical Officer of the County Asylum, Morpeth. (*With plate.*)

From the obscurity of this but recently described, although probably not at all uncommon, disease, it may be allowable to enter somewhat fully into the history and description of this case, for it is impossible to say where one, perhaps unconsciously, may be unearthing a fact or trimming a torch that in the hands of others may give light.

A. J. N., æt. 40, married, born in Northumberland, admitted to this asylum 7th June, 1884.

Family History.—Her maternal grandmother died at the age of 86; none of her other grandparents reached that age. Her other relatives are a married, paternal aunt, who suffers from a liver complaint and general debility, and has no family, and a maternal uncle unmarried, but always in good health. The patient's mother died at Rouen of peritonitis and general debility. Her father, a retired engineer, is 68 years of age, suffers from asthma and deafness in the left ear. There is no vice, intemperate habits, or other heredity to the neuroses admitted in her family history. The patient is an only child. When six weeks old her parents removed to Rouen, where she was brought up, and, with the exception of an occasional yearly visit to England, lived up to the time of her marriage in 1860. As a child she was delicate, and,

Case of Myxœdema
to illustrate Dr Mackenzie's Paper.

West, Newman lith.

being the only one, was petted and spoiled. Her home and surroundings were comfortable and very agreeable, especially before her marriage. Educated at Rouen and Paris, she speaks French and English fluently and well. At the age of five she had a severe attack of typhus fever, from which she emerged after a prolonged convalescence, but is said never to have recovered the brightness characteristic of her life before; and whooping-cough and measles at earlier ages. From childhood she has been subject to bleedings at the nose. Menstruation began at 14; always painful, but regular except when pregnant or nursing, and is of a 28-day type, and a three to four days' duration with a normal quantity.

Married at the age of 22, she immediately accompanied her husband, a mining engineer, to Servia, where they lived for nearly three years. Here her first child, a boy, was born 13 months after marriage, but died of intermittent fever at the age of 16 months. Soon after she had a three months' abortion. They then returned to Caylux, where her next, a boy, was born, and finally to England, where they had three more. About ten years ago, and after the birth of her third child, a daughter, who was rachitic, and died since of some form of fever, the patient had an ulcerated sore-throat for 18 months, which was cauterized 27 times, and large abscesses over the outer aspect of the left thigh, lumbar region, and forehead, with feelings of languor and tiredness, and, according to her own account, a swelling of the size of a walnut in each groin.

She was feeble after each confinement, and, as a rule, in bed four weeks, otherwise the puerperium was normal. She nursed her children for periods of ten to twelve months, except the youngest, which she nursed for only half that time, for she began to get more easily fatigued and sleepless at night, ending in January, 1884, in an attack of excitement. She was sent to a private asylum, from which she was discharged recovered in April, but in June of that year was sent to this asylum for outbursts of violent temper and other eccentricities. On admission she looked feeble and depressed, gave a good account of herself, and admitted frequent attacks of excitement at home from misunderstandings with her husband and other anxieties. She was fairly nourished, face somewhat cyanotic, eyelids œdematous-looking, the right more than the left. First cardiac sound almost inaudible; pulse 51, small, feeble, but regular; temp. 96·4°; diagnosis, melancholia with excitement.

In June.—She was quiet, but sleepless, and put on small doses of perchloride of iron.

In July.—She was idle, accusing nurses of cruelty, and patients of stealing her jewellery.

In August.—She was more rational, not excited, and sewing daily.

In September.—Suspicious, grumbling, and squabbling. Her colour was a little better.

In November.—In deep trouble, and must have a divorce from her husband. Some weeks before, her hair over the vertex became grey, but is now returned to its original colour. This was attributed to the iron. She sometimes said she was Lady A. J. N., but called her neighbours thieves and rubbish. She seemed very anæmic, hair thinner, and face pale.

In January, 1888.—It is noted that she was sometimes quiet and stupid, at other times affected and emotional.

In January, 1889.—Her weight was 136lbs., heavier than she has been for years. Voice slow, thick, and hoarse, and becoming more so, never getting beyond a loud whisper. She now storms at nurses and neighbours for robbery, because her position is not recognized. Again, she is quiet and grave, never speaking unless in answer to questions, except that she may say that she knows she is dying. On other occasions, again, her face is lit up with a broad, happy grin, ordering her carriage, or airing the story of her jewellery and millions. Although gaining weight her weakness seems progressive.

In April, 1889.—Her case is as follows, and may be thus arranged :—Height, five feet. Weight, 138lbs. She is not very muscular, and subcutaneous fat is of small amount. Finger and toe nails are small, thin, ragged, and evidently badly nourished. Surface of skin feels cold and dry. Skin of face smooth, that of other parts of body harsh and dry and of dirty pale colour, except that of the face, which over the lips and tip of nose is of a somewhat palish-blue tint. As a rule the cheeks are suffused with a faint blush, becoming marked, and remaining so for a considerable time if even slightly stroked or touched. The skin of the ears and other parts of the face is pale and waxy, with wrinkling of the forehead and under the lower eyelids. Alæ nasi, lips, and eyelids thickened, especially the upper lids, which droop and cover the upper zone of the pupil. Skin of palms feels dry and thickened, but smooth.

Round the ankles is perceptibly swollen, but capable of pitting. The whole skin-surface looks and feels cold and bloodless. She sometimes perspires at night. There is no anasarca or œdema anywhere apparent. The face, as a whole, looks heavy, dull, and swollen. Her diathesis is considerably strumous. She sleeps, as a rule, on the left side. There is a small cicatrix over forehead, and a cicatricial area of four by five inches over outer upper aspects of left thigh, and one over lumbar region and middle third of left tibia—the indications of old ulcers or abscesses. Temperature in the axilla 97·2° in the afternoon.

Alimentary System.—All the teeth remaining are a right incisor and left bicuspid above, and the four front teeth below.

Gums shrunken, ragged, and somewhat dirty pale. Tongue looks pale, fleshy, and as if boiled, smooth and firm to touch, clean, and without a wrinkle on its surface. It is free from tremor, and its movements are perfect. Breath slightly offensive. Saliva alkaline, somewhat inspissated, but increased. There is a slit about a quarter of an inch long in the left side of soft palate, running upwards and backwards to the middle line, with the small, pale uvula and raphe drawn to that side.

Mastication imperfect. Deglutition difficult, liquids especially apt to regurgitate into the nose, but no pain on swallowing. Appetite fair, and no unusual thirst complained of. There is slight flatulence, and occasionally pain in the left hypochondriac and upper part of lumbar regions. No nausea or vomiting, and the bowels act, as a rule, once a day. The character of the stools seems normal. The abdomen is somewhat prominent and with the usual striæ, but no appearance of ascites, tumours, pulsations, or tenderness. The left lobe of the liver is palpable in the epigastrium. Spleen, pancreas, kidneys, and mesenteric glands are not capable of palpation. The liver-dulness extends from the seventh rib to the costal borders in the right mammillary line. Left lobe passing into the cardiac dulness. Splenic dulness commences between the ninth and tenth rib. Kidneys not percussed. Stomach not apparently enlarged.

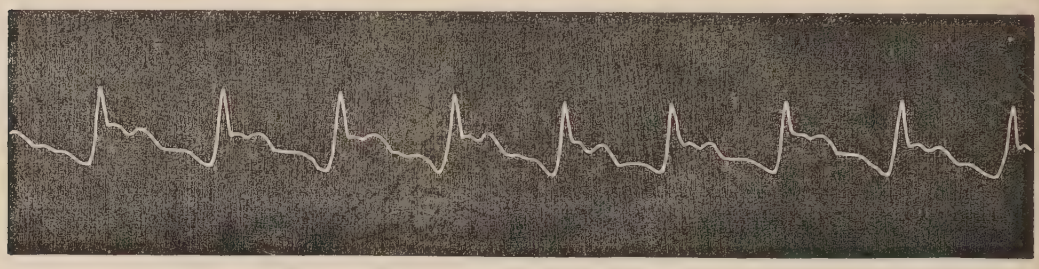
Hæmopoietic System.—The superficial lymphatics are not apparent, nor are the mesenteric, inguinal, axillary, and other lymphatic glands, or thyroid capable of palpation. Enumeration of blood corpuscles by Dr. Gowers' method gives the number of red cells per cm. as about three millions. White cells average about ·5 per hæmic unit, and hæmoglobin 28 to 30 per centum. Nothing abnormal to remark about the character or behaviour of the cells except that rouleaux are slow in forming.

Circulatory System.—Occasional pain below the left mamma, and over præcordium, and palpitation on exertion. Faintings before admission, but not since. Often complaining of chilliness. Cardiac impulse slightly diffuse, but very faint. No pulsation in carotids, or any other where apparent except in the radials. Jugular veins on both sides stand out blue and conspicuous. Cardiac dulness in the vertical line begins at the third left rib. Transverse dulness begins at the right sternal border on the level of the fourth rib. Apex in the fifth interspace. In the mitral area the first sound is displaced by a hush, the second is closed and distinct.

In the tricuspid area the first sound is reduced to a soft blowing murmur, but the second is distinct and clear. In the aortic area the second sound only is heard, and is distinct and apparently accentuated.

In the pulmonary area for the first sound there is an almost

inaudible hush; the second is accentuated. Pulse is 72, regular and easily compressed. The tracing is with Dudgeon's sphygmograph. There is no bruit or pulsation apparent in the veins.



Respiratory System.—She every now and again breaks into two or three dry harsh respiratory barks which give her pain in the throat. A small amount of mucous spit in the morning. She complains that her nose is getting larger, and that the voice, always a loud harsh whisper, requires an effort.

Laryngoscopic Examination.—On the right side, the pillars of the fauces are almost coalesced or joined by a smooth pink stripe, and on the left side by a streaked tissue like cicatricial tissue. Colour of fauces is a dirty streaked greyish pink. Vocal cords thickened and reddish grey. The larynx generally is of a dirty pale pink with greyish streaks like cicatricial tissue here and there. The epiglottis is of a dirty grey hue.

The cartilaginous extremities of both second ribs are thickened. Chest conical, and otherwise well formed. Respirations 18, regular and of the abdomino-thoracic type. No vocal fremitus apparent.

The whole chest takes part in the respiratory effort. At the end of ordinary expiration the circumference is 35 inches in the nipple line, and about an inch more at the end of a full inspiration. The antero-posterior diameter is about nine inches. There is considerable relative dulness over the left lung in front and over the base of the right lung posteriorly, with friction, but breathing harsh everywhere.

Integumentary System.—No skin eruption, but the skin is dry and rough, and probably a variety of the cutis anserina, with fine bran-like squamæ, especially over abdomen, and below the knees, with rhagades over heels, and outer borders of feet. She has no itching, but is particularly liable to the pediculus capitis unless carefully watched, and says she has always been so. The cicatrices are already mentioned.

Urinary System.—No unusual subjective phenomena at any time. Urine averages 50 ounces in the 24 hours. Amber coloured, with small flocculent floating clouds. Sp. gr. 1014. Reaction very markedly acid. No sugar, bile, or albumen apparent by the ordinary tests. There is a large whitish mucoid deposit, even in freshly passed urine, consisting of cells, nucleated squames, and other *débris*, with uric acid crystals. Urea averages $4\frac{9}{10}$ grains to the ounce.

Nervous System.—She has no headaches, neuralgia, numbness, or formication, or any sensory perversion, except cold-water-bag-feeling along the spine.

The sense of pressure and temperature is very accurate everywhere, and that of locality perfect. A painful is more readily responded to than a gentle tactile impression, but not apparently more readily felt, for she often doesn't reply to a gentle one unless roused up.

Muscular sense as tested by weights is fairly acute and accurate.

Sight good, but not so acute for small print. No abnormal encroachment on the visual field. Perception of colours good, and movements of the eyeballs perfect. Sclerotics of a palish blue tint. Pupils somewhat dilated, but not always equal. They react readily to light, and distance. There is nothing peculiar apparent in the fundus except its pale, dirty pinkish hue.

Hearing apparently normal, and taste and smell good and discriminating all round.

Voluntary movements feeble, but not otherwise impaired. Electric excitability of nerves and muscles seems perfect. The plantar and scapular are the only superficial reflexes elicited. They seem normal, but the others are not apparent on the usual stimulation. Patellar reflex readily induced by slight tap, and seems normal. There is no ankle clonus, and general muscular co-ordination, as tested by walking, standing, and other movements, is very fair. But although somewhat feeble on her legs there is no locomotive muscular antagonism apparent. Speech and sleep are already noticed. The cranium is well shaped, hair very thin, scalp thickened and freely movable.

No spinal curvature of any kind, no pain elicited by pressure or hot sponge test, except in region of lower lumbar vertebræ, where there is slight tenderness on pressure. Except the second ribs, already referred to, there is no bony abnormality apparent. There is no tenderness or swelling of joints, and the muscular system seems otherwise normal. There are, however, the feelings of tiredness and being easily fatigued already mentioned.

One would feel disposed to group her mental symptoms into three great phases probably marked by a periodicity running somewhat thus—(*a*) She is suspicious and in an aggressive mood of petty squabbling and misunderstanding all round. She is idle. (*b*) Vanity, conceit—she is a millionaire, and as expensive as a general paralytic. (*c*) Serious, looks about her stupidly and bewildered, only speaking in answer to questions, unless she says she is dying. She does some work.

There are, however, a mental enfeeblement and hebetude apparent as a constant substratum of all these phases.

As to other points that one might emphasize in the case, there is the undoubted syphilitic history, and that coincident with the onset of the insanity. In the cases recorded by Drs. Ord and

Savage there was none. I am sorry that I have not access to Sir W. Gull's works on the subject. Nor as far as I can find is there any case recorded with a syphilitic history. It is further interesting to note that there is nothing of this type of feature apparent in a photograph taken some time after marriage. There is the destruction in the throat, hoarse voice, and apparent absence of glands. The history of typhus, with its sequelæ, may or may not be of interest.

The mentalization in the non-aggressive phase is well expressed by herself in a specimen of her handwriting before me. Her husband and children she addresses with much affection, but she is never facile, and has no hallucinations. The grandeur is referred to by Dr. Clouston and others. The pitting, so invariably absent in the experience of other observers, is certainly present here, but how much of it may be due to the cardiac condition I am not prepared to say. In the anæmia, it is of interest to note, not only the increase of white cells, but the reduction of hæmoglobin out of all proportion to the reduction of red cells. The bleeding at the nose is already noticed. In the photograph the right pupil seems, if anything, the larger, but as a rule the left is so. She is increasing in weight, but progression and locomotion generally are getting slower and more feeble.

The slowness in response is, I think, not due to delay, or slowness, in sensory conduction, but to the mental hebetude. For, when asked to say when she is touched, she does so at first, but unless roused up again, the interval between stimulation and response is becoming longer, and after a few times acknowledgment ceases altogether, but a pin prick or tickling the sole elicits an instant response, as seen by the change of feature, showing that the fault is not in the conducting mechanism, but in the constant tendency to doze off. The temperature is subnormal; the memory is good, but like all brain function, is slow.

My thanks are due to Dr. McDowall for much kindness and help in putting the case together.

OCCASIONAL NOTES OF THE QUARTER.

Pensions.

Now that the Local Government Act is in operation and County Councils established, it may be useful to consider the probable effect of the new state of affairs upon the position of asylum officials.

In the House of Commons Mr. E. S. Norris has this session introduced a Bill "To enable County Councils to provide a

fund, by deductions from salaries and wages of officers and servants in their employment, and to grant superannuation allowances therefrom."

Mr. Norris said that his Bill in no way affects the position of asylum officials, but with all due deference to his opinion, his Bill, in our humble judgment, unless modified and clearly defined, might and probably would be interpreted to apply to them so as to affect their position.

Section 4 proposes to meet superannuation allowances by a deduction of 2½ per cent. from the salary or wages of each one of their officers and servants "for whom provision shall not otherwise have been made by Act of Parliament."

This is the only reference in the Bill that can be construed as applying to asylum officials, but surely it cannot with justice be said that any absolute, adequate, or certain provision has been made by Act of Parliament for asylum officials, considering that the superannuation clauses of the Lunacy Acts are merely optional, containing permissive, not compulsory powers, and that these permissive powers, hitherto exercised by the magistrates, are now transferred to County Councils. The inconsistency is still further apparent by Mr. Norris's admission, in a communication on the subject, that asylum officials are not absolutely provided for under the present Lunacy Acts, for he says "it appears that although you are not absolutely provided for under the present Act, it is most unusual that a fit and proper amount of pension is denied."

The following is the opinion of an able and experienced lawyer whom we have consulted respecting Mr. Norris's Bill: "I should say that it *does* apply to asylum officials, but that Section 4 could not be acted upon retrospectively—only in regard to such officers as may be engaged after the passing of the Bill."

This shows the absolute necessity of keeping the two classes of asylum officials distinct, namely, "existing officers" at the passing of the Local Government Act, and future entrants on office, the former class requiring some definite and special provision.

According to Section 8, the prescribed age for superannuation shall in all ordinary cases be 65 years.

This age is certainly too high for asylum service, and is even higher than the age of voluntary retirement from the Civil Service, which is 60, as recommended in the Second Report of the Royal Commission on Civil Establishments,

1888, first Report recommending 65 as the age for compulsory retirement.

It is very advisable, if possible, to retain the age of 50 for asylum service, in accordance with the Lunacy Acts; but if it should be necessary to make a compromise to satisfy public opinion, the age might be raised, but should not be higher than 55 for voluntary retirement from asylum service.

Section 9, prescribing the scale of superannuation, takes no account of the allowances of asylum officials, a very important item in calculating the amount of pension, but fixes the scale at "one-sixtieth part of the amount of his salary or wages for every year fully ended during which he shall have been in the service of the Council."

According to Section 10, the Council may at their option grant, to any officer or servant whose service has been less than 10 years, a superannuation allowance according to the prescribed scale, or a gratuity equal to two weeks' salary or wages for every year of service fully ended.

Section 13 provides for a revision of superannuation allowances from time to time, "but any such alteration must be such as to make the fund solvent."

For our part we do not see any probability of such fund being made solvent, at least for some considerable time, if at all, by a mere deduction of $2\frac{1}{2}$ per cent. from salaries and wages, and we fear that asylum officials will be trusting to a broken reed if they depend upon the solvency of such fund for their retiring allowances. Even if County Councils were to contribute another $2\frac{1}{2}$ per cent. to a superannuation fund, we very much question whether the fund would be long able to meet all the claims likely to be made.

Asylum officials will be very neglectful of their own interests if they do not keep a close watch over Mr. Norris's Bill, which is open to various objections, and which is a matter requiring the careful consideration of the Medico-Psychological Association.

The Bill should either be opposed, or an attempt made to prevent it passing without some clear definition of the position of asylum officials with regard to pension. It is all very well for the promoters of the Bill or County Councils to say that it is not intended to apply to asylums, but until the Bill contains something clear and definite respecting asylum officials, it might quite easily be interpreted as applicable to them. In its present shape the Bill is attended with danger.

The Parliamentary Committee of the London County Council, in reporting upon the Superannuation of Officers (County Councils) Bill, say, "Your Committee have no objections to offer to the Bill so far as it is permissive, but they think that exception should be taken to its compulsory provisions."

The question of superannuation has been carefully discussed by the Sussex County Council, who have referred it to a special committee of nine members, Dr. Hayes Newington, the able and esteemed President-Elect of the Medico-Psychological Association, being a member of this committee. It is within our knowledge that Dr. Hayes Newington is taking a deep interest in this question, which he has carefully studied, and of which he has a thorough mastery. He has spoken upon the subject before the Sussex County Council, and is fully prepared to safeguard our interests before the Special Pension Committee, should the necessity arise.

Asylum officials owe, in our opinion, a debt of gratitude to Dr. Murray Lindsay for the great trouble he has taken in regard to the all-important question of superannuation.

The objection to pensions on the part of the public is very apparent and already taking practical shape, for two County Councils (London and Surrey), in advertising appointments, state that "the person appointed will not be entitled to a pension."

Boards of Guardians are also following suit, for we have seen at least one similar condition in an advertisement for a poor law appointment, that of chief clerk to the vestry, parish of Kensington, the advertisement stating "the appointment not to carry a pension."

We throw out a suggestion that each County Council should appoint a Superannuation Committee, and that a representative or representatives from each committee should meet in conference to discuss this question with a view to draw up a special and uniform pension scheme, to be approved by the Local Government Board, applicable to the county asylum service throughout England and Wales.

In the House of Commons on 3rd of May, Sir W. Barttelot asked the Home Secretary with reference to police superannuation whether it would not be possible to send to each of the County Councils some tentative scheme of police superannuation which the Government might more or less approve, so that the House might be enabled to legislate on a basis more or less uniform throughout the country.

To this question the Home Secretary replied that "the suggestion appeared to be worthy of serious consideration. At present they were having actuarial calculations, intricate and difficult, but which might be of assistance in forming an ultimate decision on the subject."

The present would, therefore, appear to be a favourable opportunity to get the question of asylum-pensions considered by County Councils and the Government in connection with police superannuation.

Those County Councils wishing carefully to consider the pension question as affecting asylum officials may obtain valuable hints and useful information from the Army, Navy, and Civil Service Regulations.

In the "British Medical Journal" of 4th May will be seen the regulations for the entry of surgeons for temporary service in the medical department of the navy, which contain liberal provisions respecting pensions for wounds and to widows, etc.

The uncertain and undefined position of asylum officers and of County Councils with regard to asylums is very evident from what is passing in Parliament. On 20th May Mr. Wharton asked the Attorney-General whether the powers possessed by Quarter Sessions Committees of Visitors of Lunatic Asylums of choosing and fixing the salaries of the officers of the asylums and spending a certain sum annually for repairs and other necessary expenses, applied to the Asylum Visiting Committee of the County Councils.

The Attorney-General replied, "The question of the hon. and learned member raises a point of considerable difficulty, but in my opinion, the Visiting Committee appointed by the County Council under the Local Government Act have had transferred to them the powers of the old Visiting Committee under the Lunatic Asylums Act, 1853.

"I understand that the Local Government Board are carefully considering the point in connection with other questions which have arisen under the Local Government Act."

In Section 67 of the Lunacy Acts Amendment Bill, the principle of transferred service as reckoning towards pension is so far adopted as to apply only to "any officer transferred from one asylum to another asylum, wholly or in part belonging to the same local authority." We hold that this principle of transferred service should be extended so as to be applicable to service in any county under any local authority whatever, and not necessarily confined to the same county. The Lord

Chancellor, however, has not seen fit to adopt the suggestion. Perhaps one of the medical members of Parliament, Dr. Farquharson or Sir W. Foster, may be willing to propose this extension when the Bill is passing through committee in the House of Commons.

At the Quarterly Meeting held at Bethlem Hospital in June, the subject of pensions was discussed, and to the report of this meeting we refer our readers. (See Part IV.).

Lunacy Acts Amendment Bill.

This Bill has now (June 3rd) been read a second time in the House of Commons and referred to the Standing Committee on Law. Thus it draws its weary length along, with, however, rather a better prospect of passing than has been the case for years past. It is far from perfect, and some of its worst defects are clearly set forth by the Parliamentary Committee of our Association, and in the Report of the Lunacy Bill Committee of the Royal College of Physicians, which held an extraordinary comitia on 7th May for the purpose of discussing the Report. It was adopted on the motion of Sir Edward Sieveking, and was printed in the "British Medical Journal" of 11th May. The Report is well worthy of support by the Medico-Psychological Association. The main features of this Report are embodied in the following petition by the College to the House of Commons, and presented by the First Lord of the Treasury :—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The Humble Petition of the Royal College of Physicians of London.

Showeth as follows (that is to say) :—

The College having carefully examined the Lunacy Law Amendment Bill, 1889, recognizes the consideration which the framers of the Bill have shown for the public interest, while they have not been unmindful of the medical profession in regard to the protection afforded to persons signing certificates in lunacy, or otherwise concerned in the needful detention of lunatics, as well as in regard to the provisions of Section 59 relating to pensions. With the view to co-operate in the present effort of the Government to amend the laws regulating the custody and treatment of the insane, the College desires respectfully but earnestly to make the following

observations and suggestions for the amendment of the said Bill :—

1. With reference to the leading feature of the Bill, the introduction of the principle of the interference of the magistrate in the sending a private patient to an asylum, the College would observe that the most important point in the curative treatment of the insane is *early removal* to a well-ordered hospital or asylum. Any statutory provisions such as those of sections 3-7 will, it fears, tend (however carefully guarded by the urgency certificate of Section 8) to delay fraught with the utmost danger to chances of recovery. It believes that the certain effect of them—especially of those which ordain that the magistrate or justice shall, if he think fit, visit the alleged lunatic, summon and examine witnesses, administer oaths, and otherwise inquire concerning him—will be most seriously to hinder, and practically to prevent, the early treatment of mental disease under suitable conditions.

2. The proposals in Section 9, that the patient shall have the right to be taken before, or visited by, a judge, magistrate, or justice, if he has not been seen by one or other before admission, is open to the very grave objection that it incurs the risk of reopening in the mind of the patient the whole question of the propriety of what has been done in placing him under control. Up to this point the medical superintendent occupies neutral ground; when, however, the inquiry which the judge, magistrate, or justice is required to hold for the purpose of legalizing the certificates, necessitates the evidence of the medical superintendent to prove the patient's insanity, he is at once made to appear hostile. It is of extreme importance that the best feelings should be cultivated between physician and patient, and anything which involves antagonism must be disadvantageous to both. Further, it cannot but place the medical superintendent in a most invidious position, in that he is required to determine whether a patient, after admission, shall or shall not exercise the right proposed to be given him of seeing a magistrate.

3. It is within the certain knowledge of the College that many educated persons prefer to send their relatives for treatment, and some of the insane themselves prefer to go, to private asylums, where the patients can receive more consideration, and a more complete personal study of their requirements. It would, therefore, not be advisable to suppress private asylums; but the College desires to express its strong disapproval of the monopoly of existing private asylums, proposed to be established by this Bill (Section 54), as being a course of procedure open to most serious objections, and obviously contrary to sound public policy.

4. With reference to single patients in the house of a medical practitioner, the College desires to express its assurance that in the extension of this form of treatment and custody great future progress and improvement may be made in the care of the insane,

and that by the adoption of this home treatment many incurable and harmless patients will be allowed to enjoy the comforts of family life and the priceless blessing of the utmost freedom compatible with their proper care. The College urges that all "single patients" should be received into private houses on the same conditions as those applicable to the admission of patients into private asylums, and of private patients into public hospitals or asylums. It is, moreover, of opinion that, where suitable accommodation is afforded, medical practitioners should be permitted to receive, without a license, two lunatic patients into their houses instead of, as at present, being restricted to one. Better accommodation, care, and attendance could often be obtained if the necessary cost were thus divided between two patients.

Your petitioners therefore humbly pray that your honourable House will be pleased, for the reasons referred to in Paragraph 1 of this petition, to make such provision in the said Bill as will be consistent with the curative treatment of the insane by means of an early removal to a well-ordered hospital or asylum.

Secondly, that when once a lunatic has been legally received as a private patient, the decision as to his rightful and necessary detention shall be confided to the judgment and left to the arbitrament of the various official visitors as by law appointed.

Thirdly, that no monopoly be granted to existing licensed houses, but that the licensing regulations be left as they now are, in the discretion of the justices at Quarter Sessions, and of the Commissioners in Lunacy, and that they should be under the healthful influence of free competition.

And fourthly, that all "single patients" should be received into private dwellings on the same conditions as those applicable to the admission of patients into private asylums and of private patients into public hospitals or asylums, and that medical practitioners having sufficient accommodation should be permitted to receive, without a license, two private patients instead of one as in the Bill provided.

We would add that the clauses in Section 43 respecting mechanical restraint appear to be utterly unnecessary so far as benefit to the lunatic is concerned, who is more likely to be the loser than the gainer by their introduction. The chief effects will probably be to deprive the lunatic of the use of mechanical restraint when it might certainly be of benefit to him, and to add to the ever-increasing clerical work and correspondence of medical officers.*

* One medical superintendent has already stated to the Lunacy Commissioners that, should the Bill be passed in its present shape, he foresees the necessity of clerical assistance to enable him to carry on the correspondence which would result from the despatch of all patients' letters to the office of the Lunacy Board.

It is said that any mechanical restraint at present employed would be embraced in the terms of the first clause, namely, "for the purposes of the surgical or medical treatment, or to prevent the lunatic from injuring himself or others," but we distinctly object to this interference with the action of the medical superintendent.

Dr. Isaac Ashe, of the Criminal Asylum, Dundrum, in a letter in the "British Medical Journal" of 11th May, says:—"There is yet another reason for the employment of mechanical restraint in the treatment of the insane, besides those now inserted in the Lord Chancellor's Bill, namely, the necessity of keeping the patients clothed." But surely the case of denuders is already met by the terms of Section 43, for to clothe such lunatic and to keep him warm is certainly medical treatment, and prevents him injuring himself by bringing on fatal pneumonia through exposure.

Sections 64 and 65 give powers to the local authority to provide accommodation for private patients, but these powers being merely permissive, are not at all likely to be acted upon to any great extent, if at all, and will not be likely to affect good private asylums or to lead to their closure. We do not think that County Councils will be disposed to embark in a speculation with ratepayers' money for the purpose of providing accommodation for private patients, either by enlarging existing asylums, erecting new asylums, or purchasing licensed or other houses and land suitable for the purpose, as provided in Clause 2 of Section 65.

Section 83 contains, perhaps, one of the most useful and practical provisions in the whole Bill, giving power to the Lord Chancellor to amalgamate the lunacy departments. It is to be hoped that the Lord Chancellor will be able to avail himself of the excellent opportunity afforded in Clause 2, Section 83, of effecting much-needed reforms in the offices of the Lord Chancellor's Visitors of Lunatics and the Commissioners in Lunacy, by lessening the expense of visitation, facilitating more frequent inspection by abolishing the dual visit, re-arranging and more nearly equalizing the duties (the Chancery Visitors having by far the lightest share of the work under the present system), abolishing the legal and increasing the number of medical commissioners, as suggested by Dr. Farquharson this session in the House of Commons.

The Scotch and Irish Visiting Lunacy Commissioners, all of whom are medical, visit singly, and are enabled to pay two visits annually to every public asylum, whereas the

English Commissioners visit in couples (legal and medical), and are only able to make one visit annually to county and borough asylums. There can be no doubt that the English plan is unnecessary, besides being more expensive and less efficient than the Scotch and Irish plans.

If we are not mistaken, the amalgamation of these two offices was first ably advocated in this Journal by our distinguished ex-President, Dr. Clouston.

The article on "Lunatics as Patients, not Prisoners," by Dr. Batty Tuke, in the "Nineteenth Century" for April, is much more applicable to successive Governments, Lord Chancellors, County Councils, and asylum authorities, than to medical officers, for the whole tendency of legislation of late years has been to ignore, or at least minimize, the medical treatment of lunatics, to neglect medical advice, and to weight asylum medical officers, already overburdened, with clerical and administrative work.

At present there seems to be a very questionable competition or rivalry between pauper asylums with regard to the lowness of the maintenance rate. No proper or fair comparison can be made with regard to the maintenance charge in various pauper asylums, for the charge is sometimes reduced by an accumulated surplus and otherwise, this surplus amounting in some cases to several thousand pounds. In one case the surplus amount of between two and three thousand pounds, being profit on out-county patients, has been handed over to the County Council instead of being appropriated to a "Building and Repairs Fund." This surplus amount, if applied to a reduction of the weekly maintenance charge, a practice recently followed in various asylums, would have the effect of reducing the maintenance charge two shillings or two shillings and twopence weekly per patient. In various asylums the maintenance charge to the unions is considerably less than the actual cost! In two or three years, when County Councils have settled down to fair working order, and asylum accounts have been examined by the Local Government Board, it is probable there will be greater uniformity in asylum accounts, and a greater facility for making a fair comparison between the maintenance cost of one county asylum and another. When this takes place, a general rise in the maintenance charge for pauper lunatics may be expected rather than a reduction.

Asylum Attendants.

No one familiar with the conditions upon which the successful management of asylums for the insane depends, will deny the extreme importance of securing and retaining a good class of attendants, nor will anyone deny that the post occupied by an attendant is as onerous as it is responsible. The monotony is often extremely wearisome, and when it is broken, the cause is too often of a disagreeable character, such as the irritating language of patients or dangerous assaults. Sympathy with those who are from day to day, and often from night to night, subjected to this strain, ought to be, and no doubt sometimes is, felt and shown by medical superintendents and committees.

Feeling strongly as we do on this subject, we rejoice to read the sensible remarks made by Mr. Rooke Ley, in regard to attendants, in the last Annual Report of the Prestwich Asylum, the condition of which is recognized by all acquainted with it, as highly satisfactory. He notices that during the last 25 years, hospital nursing has become a fashionable occupation for the poorer middle classes, but he fears that asylum work has not the same attractions.

"... No doubt much of the unrest among attendants is due to causes, some of which are to a certain extent removable. Apart from the nature of the duties which they have to perform, and which must always be arduous, trying, and often disagreeable, the hours of work are long; living night and day in wards with the insane, their rest is apt to be disturbed, and the calls made upon their physical and mental energies are greater than many can bear. To remedy these drawbacks, and to lighten as much as possible the labours of the attendants, as well as to ensure to them all reasonable comfort and relaxation, the night nursing staff in this asylum has of late years been largely extended, and made sufficiently numerous to allow of a better division of labour, by which means the services of the day attendants can be dispensed with after a certain hour in the evening; and in order to afford relief from the strain of constant intercourse with the insane the Committee of Visitors decided to provide in each division a home where the attendants could retire after the work of the day was over, or at other times when off duty, thus enabling them to obtain that relaxation by day and that rest at night so essential to the proper

performance of their duties. In 1887 these buildings were commenced, and are now furnished and occupied, the one on the female side to its fullest capacity. They afford accommodation on the male side for seventy-six and on the female side for eighty-six, day and night attendants, with a large proportion of superior officers. The night attendants' accommodation is completely shut off from that of the day attendants. The apartments are roomy, well furnished, and well adapted to secure the personal comfort of those for whom they were designed. There can be no doubt that these additions have accomplished the object the Committee had in view, and they meet a demand for a long time urgently felt, but hitherto only imperfectly satisfied. The accommodation provided, and the arrangements made for the relaxation and comfort of the attendants, are now quite equal to what persons in the same position obtain in other public institutions, and there is no doubt these advantages will greatly contribute towards inducing a higher grade of applicants to embrace this calling, and will enable the institution to retain their services."

Yes, that is the whole secret. Medical superintendents are chiefly to blame for most of the difficulties connected with attendants. They have not acted as the advocates of the attendants, they have not pushed their claims for more consideration and more liberal treatment, but have rather kept them down socially and officially, seldom failing to report what an unsatisfactory class of people they are. Had medical superintendents acted differently towards attendants, had they studied their comfort, interests, and well-being generally, the difficulties now complained of would have mostly disappeared by this time. It is full of hope to find that in some asylums much is being done to ameliorate the lot of this hitherto much abused, shamefully over-worked, and disgracefully under-paid class of persons.

It is with much satisfaction that we reproduce the following paragraphs from the Report of the Committee of the Hanwell Asylum :—

"The Committee observe with pleasure that year by year there appears to be a growing inclination on the part of the attendants (manifested by the diminishing frequency of breaches of discipline and of resignations) to regard their employment in the light rather of a permanent vocation than as a temporary *modus vivendi*. Liberal wages and attention to their comforts and recreation have probably

much to do with this, but it should be added that of late years the class of candidates for the post of attendants has greatly improved, and that the inducement of becoming in due course eligible for superannuation allowance has operated most strongly in retaining the services of experienced and consequently valuable servants."

Again referring to attendants, the Committee say :—

"Amongst much that is necessarily painful in an asylum, one of the pleasantest features in going round the wards is to observe the good understanding and the strong personal attachment which exist between many a patient and many an attendant. This forms one of the few returns that an attendant receives for years of anxious, disagreeable, and harassing work."

We were gratified to find not long since, while visiting the Morpeth County Asylum, that the Medical Superintendent, Dr. MacDowall, had recently adopted a course in regard to his attendants calculated to increase their comfort. He refers to this in the following remarks in his report to the Committee:—

"On several previous occasions I have brought under your notice the hardships of an attendant's life, the long hours, the harassing nature of the work, the small pay, especially for married men, and the insufficiency of leave. I am glad to say that by making the necessary arrangements, it has been possible to allow every attendant and nurse to be relieved from duty after 5.30 p.m. once every week. This is in addition to leave previously enjoyed. Although apparently a small boon, it has been much appreciated, and is one step in the direction I have often urged as constituting one of the pressing reforms required in public asylums."

We commend the following observations of the long-experienced Superintendent of the Cornwall County Asylum, although we should doubt the necessity of rejecting the application of a good attendant because one of his ancestors had had an attack of insanity:—

"The inducements hitherto offered to attendants in this asylum have clearly not been in excess of the requirements. The duties are irksome, trying, disagreeable, and often dangerous. Constant association with the insane has certainly a deteriorating influence, and promotion to the higher posts is necessarily often slow. I am, therefore, pleased when promotions to more lucrative posts in other

institutions take place from this, for though I think many changes in an asylum staff bad and dangerous, yet too stagnant a staff prevents progression. To secure the best treatment in a large asylum, one should have a staff composed of very varied qualities—the grave and cautious, the resolute and gay, the thinker, the worker, and the person who delights in amusement, as well as the strong and swift. All should, however, be healthy and free from hereditary tendency to insanity, and a medical examination should be required on admission to the service."

In conclusion, we invite communications from the members of the Association on the best means of promoting the well-being without lessening the efficiency of asylum attendants, convinced that there is no subject connected with our institutions of greater practical importance.

PART II.—REVIEWS.

Hypnotisme en Suggestie en hunne Therapeutische beteekenis. Dr. B. H. Stephan. Amsterdam, 1888.

Dr. Stephan's publication is more a critical review of the past history and present aspect of Hypnotism than a contribution to the study of its phenomena. The Pythian oracles at Delphi, the supernatural influence exerted by the Brahmins and Buddhists, and the magic and faith cures of the middle ages are all attributed to a hypnotic or suggestive influence. Hypnotism is therefore in no sense of the word a latter day discovery, nor is the controversy as to its *bonâ fides* or its therapeutic signification at all novel. Mesmer's career is dealt with particularly, and the influence of de Puységur, in propagating the doctrines of clairvoyance, remarked. With the unfavourable report of the Commission appointed in Paris, in 1784, to investigate Mesmer's method of treatment, Mesmerism and Somnambulism lapsed into oblivion, and it was not until 1840 that Braid, of Manchester, resuscitated this defunct science. He, however, placed the question on a fresh footing, that of scientific observation and experimental investigation, and he must be regarded as the veritable founder of our present knowledge; it was he who originated the term "Hypnotism," and who first demonstrated the fact, one of great importance, since by it Hypnotism was for

always deprived of its mystic novelty, that the hypnotic sleep could be induced by fixing the gaze on some inanimate object. He was cognizant of suggestion and its therapeutic power, but his unaided efforts were not sufficient to keep this science alive, and notwithstanding his so many and important discoveries, his contemporaries did not grant him that sympathetic interest his investigations merited. The truth of Braid's observations have been verified in their main points—the reality of a hypnotic state is only questioned by the ignorant who desire to seem wise—it can be induced by any incitement, visual, auditory, sensory, olfactory, or gustatory, causing mental fatigue. Since intact consciousness is dependent on an intact condition of the grey cortex of the cerebrum, we are justified in concluding that in hypnotism there exists a disturbance in the cortical functions. Is the disturbance reflex due to persistent irritation of the optic, auditory, gustatory, or olfactory nerves, or does the irritation of these tracts induce reflex vascular spasm (in the lethargic stage of Charcot) or hyperæmia (in his cataleptic and somnambulent stages)? This is still a debateable point. It is certain, however, that in most subjects a passing post-hypnotic paralysis of the will and consciousness will for some time exist. A question which is occupying the attention of investigators, especially in France, is this—Can every individual be hypnotized, or does it require the presence of some definite malady, without which Hypnotism is impossible? In other words. Are we to consider neurotic and hysterical subjects especially adapted for its influence, or are neurotic antecedents unnecessary to induce the hypnotic state? If it be correct that fatigue induces Hypnotism, then it is necessary to investigate the means whereby this fatigue may be engendered in each separate subject; but then there is *a priori* no single reason why every individual should not be brought under hypnotic influence. That neuropathic and hysterical individuals appear to have an especial aptitude therefore, and that their hypnotic sleep can be differentiated by certain special objective signs from the true physiological sleep are undoubted facts. If we can induce the hypnotic sleep in a non-neuropathic individual who subjects himself voluntarily thereto, where is the evidence that points to this artificial sleep being other than a physiological one? Some would make the susceptibility to Suggestion in the hypnotic state the distinguishing feature, but persons in a true physiological slumber are frequently markedly susceptible to Suggestion. Maury, in

his work "Sommeil et rêves," gives us an instance of how he desired to awake certain sensations in a patient while in deep physiological sleep, without disturbing him, letting him dream for some time, and then awaking him. These artificially induced dreams were then found to centre around the originated sensations, and differ in no way from the phenomena which can be obtained in hypnotized hysterics. It is also a well-known fact that a connected conversation can be carried on during physiological unconsciousness with such persons as evince a hyperactivity of their speech centres during sleep, without there being any recollection thereof on awaking, and children may be made to change their posture in bed by simply softly whispering to them a wish to that effect. But everyone can call up instances of the colouring of dreams by external sensations and influences, so that not only along the auditory, but also by the sensory tracts, can a pseudo-suggestion be transmitted. Susceptibility to Suggestion is therefore no pathognomonic indication of non-physiological sleep. According to Charcot and his school, there are two forms of Hypnotism—"la grande Hypnose" and "la petite Hypnose." In the first there are three phases to be distinguished: (1) The Cataleptic phase—induced by some loud and unexpected sound, by a flash of light, and in some subjects by visual fixation; reflex abolition and complete analgesia, with no evidence of neuromuscular hyperexcitability, exist in this stage, with which is combined a susceptibility for some degrees of Suggestion. (2) The Lethargic phase—induced either by visual fixation or from the cataleptic state by the closure of the eyes. Complete analgesia, increased reflexes and nervomuscular hyperexcitability, mark this. There is here no suggestive susceptibility. (3) The Somnambulistic phase—induced either by visual, auditory, or sensory fixation, or from either of the previous states by influences on the sensation. The hyperexcitability of muscles and nerves is now in abeyance, there is superficial anæsthesia, but the marked characteristic of this state is the extreme susceptibility to suggestion. The existence of differentiable degrees of "petite hypnose" is in no way denied by the followers of Charcot, Richet having described similar stages, but they place these more or less directly in contradistinction to the "grande hypnose," because up to the present they have not been characterized by definite objective physical phenomena. The Parisian school, which consequently maintains that Hypnotism can be induced without the

suggestive aid, has recently experimentally investigated the influence of suggestion in their hypnotized subjects in every way, and has contributed to our knowledge important and interesting results. The School of Nancy, with Bernheim, Liébeault, and Liégois at its head, appears to differ from the Parisian school in two particulars, (1) that no relation exists between hysteria, corresponding neurasthenia and Hynotism, and (2) that for the proper development of hypnotic phenomena and for therapeutic application Suggestion is of the greatest value. With regard to the first point, there is little or no doubt that in a majority of hystero-epileptics the various phases of Charcot can be induced easily, with certainty and without any suggestion, but it is at the same time also an accepted fact that there are hystero-epileptics in whom these phases cannot be brought about, even as there are subjects in whom the primary cataleptic status can be produced without there being any suspicion of the presence of hystero-epilepsy. May not the onesidedness of the view taken by the Parisian school be dependent upon the special and singular *materiel* which finds its location in the Salpêtrière? Another point about which Charcot's followers appear to hold an exclusive and somewhat biassed opinion is that the hypnotic is to be distinguished *in toto* from the physiological sleep, and they have some grounds for their view, insomuch as they draw their deductions from the physical phenomena observed during the hypnotic state in hystero-epileptics—their principal subjects. The author reviews the ethical and medico-legal aspects of the question, and deals at length with the means advocated by the Parisian school for counteracting the social evils that might arise, but space will not permit us here to enter on this interesting point. Concerning the second of the doctrinal points of the Nancy school, viz., the induction of Hypnotism by means of Suggestion, this has been known for many years. Faria, in 1815, employed such in his "séances de magnétisme," in Paris; and the same method is at the present day employed by Bernheim and his followers, the therapeutic suggestion following on the suggestively induced Hypnotism. The Parisian school, while holding that Hypnotism can act as a curative agent, does not ignore the therapeutic value of Suggestion, for Charcot and his fellow-workers have employed it with advantage in paralysis and psychic disturbances, but it seems that they are feeling their way slowly by experiment, deducing its therapeutic value from definite, exact, and

circumstantial indications. He then deals with the therapy of Hypnotism, holding that we in our daily practice unconsciously employ an indirect form of Suggestion, for even serious maladies are frequently influenced for the good by the hopefulness and assuring promise of restored health from the medical attendant. He quotes numerous instances of hysteria cured by faith, and so leads up to the question, Can organic affections be influenced by Suggestion? Tamburini and Seppili have demonstrated by the plethysmograph that vascular dilatation is one of the phenomena of the lethargic stage of Hypnotism, while in the cataleptic a vascular contraction exists peripherally. Beaunis has been enabled to diminish the pulse-rate from 70 to 25, by means of Suggestion, demonstrating it by sphygmographic tracing, while Focachon, by suggestion of vesicant applications to the shoulders, so modified the capillary circulation that blisters appeared. There is thus, indeed, a certain amount of foundation for the statement that we can, by inducing a change in the capillary circulation by Hypnotism and Suggestion, influence organic affections; but at present the gap existing between well-authenticated facts and this therapeutic hypothesis is too wide for us to recommend this novel medicament in exceptional maladies. He then deals with the objections urged against Hypnotism. First, that a course of hypnotic treatment is attended with some amount of danger to the patient. In the Salpêtrière it has, in truth, been found that simple hypnotization may occasion a diminution in the number and intensity of the attacks in hystero-epileptics, but on the other hand it has been established that after a sleep hypnotically induced, just as after the administration of morphia or chloroform, neuropathic phenomena can ensue which were unknown to the patient anterior to the employment of this narcosis. Many hysterics experienced their first convulsive seizures when gathered around Mesmer's *baquet*, and many instances of nervous accession subsequent to Hypnotism have been published by observers whose trustworthiness is beyond doubt. By the aid of Suggestion, as we have seen above, some claim to be able to dissipate even these unfavourable phenomena, "but," in the words of Stephan, "taking into account the many and well authenticated observations wholly in conflict with this statement, it must be regarded as the outcome of a subtle sophistry rather than of a scientific truth." Hence it is that the Parisian school leans to the desire of first applying

Hypnotism and Suggestion to hystero-epileptics, in whom at least no other pathological phenomena can be developed than such as have previously existed. It is worth while reflecting how this new therapeutic agent can be seriously entertained, when there is any danger attached to it. The evils which the use and subsequent misuse of morphia, chloral, alcohol, cocaine, and the bromides have engendered are in no measure less than those which may follow Hypnotism. The ultimate effects of the former are known and dreaded; have we then no fear of the consequences of an agent of whose nature we are in so much ignorance? A second objection to Suggestion is this—that a neuropathic symptom may indeed be dispersed by its means, but that it either re-establishes itself, or gives place to some other neurotic phenomenon (Binswanger). This, however, is no ground for discarding an agent, the extent of whose therapeutic powers we have not yet gauged. Hypnotism and Suggestion cannot rank as a panacea against every possible functional affection, and the oftentimes transient nature of the cure is merely a proof that with this method we have a variety of other methods at work of which we, at present, know nothing. With the third objection viz., that Hypnotism and Suggestion cannot be regarded as a means meet for the employment of medical science, he deals but briefly. Any means whereby suffering and disease can be alleviated are vindicable. The same objection might be urged against many of our nervine remedies, *e.g.*, massage. There is, however, one important point which in reviewing the therapeutic value of Hypnotism must not be lost sight of. It is acknowledged that hysteria and neurasthenia encroach more on the domain of psychical disturbances than on that of organic nervous affections, and that such psychoses are induced reflexly, but more frequently directly, being in all probability dependent on some functional disturbance in the cortex cerebri. It is in these psychoses that the employment of Hypnotism and Suggestion may be of benefit, acting as an adjuvant to diet, physical and psychical repose, hydrotherapy, electricity, and massage, and last, but not least, the removal of the patient from his or her deleterious surroundings and influences. He sums up his views under four headings: "(1) The experimental study of Hypnotism and Suggestion is of deep medical interest and merits serious consideration. (2) It is probable that in the susceptibility to Suggestion in the hypnotic state an important therapeutic factor will be found to be existent. (3) Since a

certain amount of risk appears attendant on the hypnotic state, and as no strong indications have yet been established for the wide employment of suggestive treatment, a circumspect and cautious therapeutic application must be made thereof. (4) While the application of this therapeutic agent is contemplated for other than purely dynamic disturbances, though the probability is not great that organic affections will be influenced thereby, the possibility of such application must not be lost sight of. At present facts are wanting which will carry with them conviction as to its value here."

Francis Bacon: His Life and Philosophy. By John Nichol, M.A., Balliol, Oxon, LL.D., Professor of English Literature in the University of Glasgow. Part II.: *Bacon's Philosophy, with a Sketch of the History of previous Science and Method.* William Blackwood and Sons, Edinburgh and London, 1889.

In a recent number of the Journal we reviewed the first part of this work, and are glad to welcome the companion volume containing the Philosophy of Lord Bacon. Professor Nichol has given us an able sketch of the history of previous Science and Method, and has in this and in the account of the philosopher's own views displayed the same impartiality and psychological insight as he manifested in his notice and judgment of the philosopher's life and character. Nowhere would it be possible to find in so small a compass so large an amount of knowledge within the range of subjects touched by the mind of Francis Bacon. Did our space permit, we could occupy many pages in presenting the most important notes dwelt upon by the author. We must content ourselves with the following passages, which bear more especially upon mental science. The author says, speaking of Descartes, that the difference between Hobbes, Locke, and Hume on the one hand, and Berkeley, Reid, and Kant on the other, is that the spirit of the first group, as that of Bentham, Mill, and Comte, is more Baconian than Cartesian. "From the "Instauratio Magna," or its influences, they have inherited and transmitted that mode of thought which refers science for its source to observation, discards innate ideas, subordinates metaphysic, and inclines to refer psychology to physiology. Bacon himself was not a materialist,

but it may be admitted that the exclusive application of the inductive method to mental science tends to materialism. One of the earliest suspicions of the fact is recorded in the confession of a reactionary royalist of the century, H. Stubb, that he had been for a time led astray by the mechanical school; but it does not seem to have aroused systematic antagonism till D'Alembert and Diderot inscribed Bacon's name on the front of their "Encyclopédie," the former saluting him as the most universal of philosophers, and the latter adopting the title "De Interpretatione Philosophiæ" for one of his sceptical books" (p. 236).

It is an interesting fact that the College of Philosophy, instituted in London in 1645, which developed into the "Royal Society" in 1662, was suggested by the scheme of "Solomon's House" in Bacon's "New Atlantis."

Lastly, we are reminded that the Scotch School of Psychology claimed that they followed Bacon in the application of induction to mental science. "Reid explicitly dates from the 'Novum Organum' the new impulse in a direction more just and more fertile than that of the Organon of Aristotle; and Dugald Stewart, regretting that Bacon has been more praised than studied, adopts his principles as converting common-sense into science, and indicates the originality of his logic" (p. 240).

We have said sufficient, we hope, to interest our readers and to induce them to trace, with the help of Professor Nichol's work, the extent and character of the debt, the development of inductive psychology owes to the philosopher from whom the motto on the title page of the "Journal of Mental Science" is borrowed.

The Insane in Foreign Countries. By William P. Letchworth, President of the New York State Board of Charities. New York and London: G. P. Putnam's Sons, The Knickerbocker Press, 1889.

Mr. Letchworth is well known for the interest he has long taken in the insane as a Commissioner of the New York State Board of Charities. The present work is the result of a visit to public institutions in Europe some years ago during seven months. A historical sketch precedes a notice of his visitation of asylums. Among the illustrations there

is one of Norris in chains, which differs from that with which English readers of asylum literature are familiar. We should be glad to know its source. Notices are given of the inspection of Colney Hatch, Hanwell, Banstead, Leavesden, Caterham, Haywards Heath, Brookwood, Wakefield, Wadsley, Prestwich, Whittingham, Birmingham Borough Asylums, York Retreat, Woodilee, Rosewell, Morningside, Cork, Belfast, Letterkenny, Dublin. In addition to these asylums in Great Britain and Ireland, Mr. Letchworth visited a number in Norway, Sweden, Denmark, Germany, Switzerland, France, and Belgium.

A detailed account is given of the Provincial Insane Asylum of Alt-Scherbitz, near Leipzig. The asylum was founded by Professor John Maurice Kœppe, and was built for 450 patients, but afterwards enlarged so as to admit 600. It was opened in 1876. The central buildings are separate from one another. In addition there is the superintendent's house, and there are cottages for patients around. The river Elster flows through the estate. There is accommodation for 60 harmless and infirm lunatics of each sex in two cottage pavilions. There is a kitchen for the whole asylum, from which the meals are conveyed to the separate departments. The author saw the vehicle containing dinner, so constructed as to keep it warm, on its way from the kitchen to the cottages, in charge of two patients, one being the driver and the other perched on a seat behind. Each domicile has its own scullery and pantry. There are extensive farm buildings, including a fine dairy; there is also an orchard, a large hot-house, and a well-stocked fish-pond. Employment is carried out to a marked extent, there being from 85 to 90 per cent. of the patients occupied in some work. Dr. Paetz, the superintendent, states that there has been no accident from the use of agricultural implements. A number of plans accompany the text.

About 70 pages are devoted to a *résumé* of the observations made by the author, and will be found to be of interest. In fact, the whole work is creditable to Mr. Letchworth; the only criticism we are inclined to offer is that he avoids mentioning the dates of his visits to the institutions he describes. The illustrations are well done.

Nature and Man: Essays Scientific and Philosophical. By William B. Carpenter, C.B., M.D., LL.D., F.R.S., with an introductory Memoir by J. Estlin Carpenter, M.A. London, Kegan Paul, Trench, and Co., 1, Paternoster Square, 1888.

In this work Dr. Carpenter appears not only as a writer on Physiology, but as one expressing his inmost thoughts on great questions connected with man and the universe. The sketch of his life will be read with interest, revealing as it does the heart as well as the mind of William B. Carpenter. He shines in all his domestic relations.

As is well known, a painful difference of opinion interrupted for a time at least the friendly relations between Professor Laycock and Dr. Carpenter in regard to the subject of the "reflex action of the brain," as it was called by the former, and "unconscious cerebration," the term adopted by the latter. We have always regretted the apparent want of candour at one time manifested by Dr. Carpenter in relation to the original views of Professor Laycock. We are glad to observe that in the "Memorial sketch" before us, Mr. Estlin Carpenter candidly speaks of the reflex activity of the brain having been first suggested by Dr. Laycock.

Dr. Carpenter appears to have greatly modified his views in regard to humane responsibility during different periods of his life. Originally he sided with the Determinists, but ultimately he took a decided stand in favour of what is called freewill. The Editor thus writes, "Dr. Moreau's 'Psychological Studies on Hachisch and on Mental Derangement' made a deep impression on him, for it enabled him to grasp, as he had never done before, the significance of the control exerted by the will in a mind of healthy activity over its own trains of thought. The Phenomena of Hypnotism also excited Dr. Carpenter's interest, for they threw further light on the conditions of the mind's activity when its volitional control was suspended, and led him to reflect on the influence of mental states on muscular feeling and exertion in the presence of certain powerful ideas which the sensations fail to correct. The study of a number of criminal trials brought clearly before his views the forces of different passions and propensities, and the relative feebleness of the checks imposed upon them by the will. In the discussion of insanity and of responsibility for acts of violence, he found himself compelled to analyze the

whole processes of the moral life, and his results were surprisingly different in 1847 from those which he had previously announced in 1845. Starting from the frequent experience of moral conflict between (for example) the duty of a professional visit to a patient needing aid, and the desire to escape a wet ride or to avoid bringing home infection, he inquired in what lay the deciding power. Rejecting the current explanations of the autocratic nature of conscience or the moral sense, which pronounced directly on the right or wrong of any action, he expressed his sympathy with a view of its real function propounded shortly before by an anonymous critic in the 'Prospective Review,' who affirmed that moral good was not a quality resident in actions, but that ethical judgments were always relative, and involved a preference for one spring of action over another" (p. 57).

Of the Will, Dr. Carpenter wrote thus: "The Will by a peculiar effort, represses the vehemence of one class of motives by forcibly withdrawing the attention from them and directing it to another of a higher character. The mind, thus swayed hither and thither by various motives contending for the mastery, is at last decided by those which present themselves most forcibly before it; and it is in keeping some in the back ground, and bringing others into clearer view, that the power of the will seems to be exerted in modifying the decision."

It is pointed out by the editor that this passage contains the germ of his future views in regard to volitional as distinguished from automatic action, and that it involved a free surrender of the earlier determinism. "From this time he ceased to teach that all human actions were 'the results of the operation of circumstances upon the mental constitution of each individual according to fixed laws.' He recognized the share which each man may take in the formation of his own character. This thought grew in importance as his observation and experience extended" (p. 60).

Probably no one exerted a greater influence upon the psychological doctrines of Dr. Carpenter than Mr. Braid, of Manchester. Braidism, or Hypnotism, found in him an early and warm advocate and expounder. When he introduced the phenomena of what, up to the period of Braid, was called mesmerism, into his Human Physiology as scientific facts both true and important, comparatively few had reached the same point of conviction.

It would be beyond the scope of this Journal to dwell upon the inner spiritual life of Dr. Carpenter. For this we must refer the reader to the Memorial itself, which occupies about 150 pages. The accident which terminated his active life was indeed deplorable. "On retiring to rest (November 9, 1886), he took a hot-air bath to ease the stiffness and rheumatic pains which the damp weather rendered unusually severe, when the accidental overturning of the lamp inflicted such injuries that after a few hours—which closed in tranquil sleep—he passed quietly away." His age was 73.

The essays appended to his Memorial comprise: "The Automatic Execution of Voluntary Movements;" "The Influence of Suggestion in Modifying and Directing Muscular Movement Independently of Volition;" "The Psychology of Belief;" "The Fallacies of Testimony in Relation to the Supernatural;" "The Doctrine of Human Automatism."

We can strongly commend this volume to our readers, and it is certainly calculated to leave on the mind a favourable impression of the intellectual ability and the high-toned moral character of this many-sided thinker and worker, as well as lucid writer and teacher.

The Cerebral Palsies of Children. By William Osler, M.D., F.R.C.P.

This contribution to medicine is essentially clinical. The material upon which the study is based is very large; it includes 151 cases of cerebral paralysis. Dr. Osler starts with a brief definition of the term cerebral palsy, a palsy, viz., which is the result of a lesion situate in the motor pathway anywhere between the cortical cells and the grey matter of the cord; and he contrasts this with the spinal form of palsy in which the lesion is situate somewhere between the ganglia of the anterior horns and the motorial end plates. The distinction symptomatically between these palsies, cerebral and spinal, is well marked; in the former "there is paralysis with spasm or disordered movements, and exaggerated reflexes," but "neither rapid nor extreme wasting, and normal electrical reactions;" in the latter there is "the combination of paralysis with rapid wasting, early loss of reflexes, absence of rigidity, and marked

changes in the electrical reactions." The proportion which the cases of cerebral palsy bear to those of spinal palsy is, according to Dr. Osler's experience, about 1:4, 120 cases of the former having occurred to about 500 of the latter.

Infantile hemiplegia is first considered. One hundred and twenty out of the total number of cases belonged to this category, and by far the greatest number of these occurred during the first three years of life; 15 of the 96 were congenital. The etiology shows a curious relationship to infectious diseases, in 16 cases there being a history of the paralysis coming on in connection with or just after such disease. Nine of the cases were forceps cases. The evidence of syphilis as a factor in the production of the palsy is almost wanting, there being but one case with this history. The repeated occurrence of convulsions is suggested as having possibly caused the palsy in the five or six cases which gave the record. Embolic processes appear to be very rarely causal. In Chapter II. the symptoms of the disease are considered, and the morbid anatomy. Noteworthy among the symptoms is the frequency with which mental defects present themselves along with the palsy, though the cases cited do not, for reasons given, speak so definitely on this point as they might. The occurrence of epilepsy is another important and frequent sequela of hemiplegia; it is usually confined at first to the paralyzed side, but it tends to become general. The morbid anatomy shows embolism, thrombosis, and hæmorrhage as causal in a certain proportion of cases; the age of onset of such is mostly above three years, and in 10 out of the 16 cases the children were above six years of age. Atrophy of the cortex with sclerosis is a much more frequent event; this atrophy may be accompanied by the formation of cysts, *i.e.*, with the production of porencephalus.

The rather contradictory name "Bilateral spastic hemiplegia," heads Chapter III. Dr. Gee's term, "Spastic diplegia," appears to us preferable. In this affection arms and legs suffer, but the legs are most affected. The mental condition is "profoundly disturbed." Diffuse atrophic sclerosis of the motor area is the most common condition found post-mortem, and there may coexist descending degeneration in the pyramidal tracts. In the cases of hemiplegia cerebralis there is no mention of the cord state.

Spastic paraplegia is the last of the group of cerebral palsies. The paralysis is confined to the lower limbs. The

mental condition is generally impaired, but less so than in spastic diplegia. No fresh light is thrown on the morbid anatomy.

In the concluding chapter the pathology and treatment of these forms of cerebral paralysis are considered. Of interest here is the fact that hæmorrhage is the cause of a certain, though small, percentage of the cases of cerebral palsy, and that the morbid anatomy of this hæmorrhage may be identical with that of the cerebral hæmorrhage of adults. In those cases which Dr. Gowers characterizes as birth palsies, the trouble having persisted from birth, there is frequently a history of difficult labour. Meningeal hæmorrhage would seem to be the most frequent cause of the palsy. It is of interest to note that Dr. Osler makes no mention of hæmatoma of the dura mater, which in the adult is not uncommonly the sequel of a meningeal hæmorrhage, should the patient survive long enough; neither does Dr. Gowers mention such. This appears to us to be a weak point in the evidence of the hæmorrhagic origin of these forms of palsy. Dr. Osler suggests that some of the cases may be due to a fœtal meningo-encephalitis.

Where the palsy supervenes during the first two or three years of life there is yet more obscurity as to the mode of origin. The author states the position well:—"We require to know the pathological process lying at the basis of the convulsive attacks with coma, which come on suddenly, or after a slight febrile movement, frequently succeed an infectious disease, and leave a hemiplegia with too often its disastrous consequences—epilepsy and imbecility." He then discusses Strümpell's view as to the occurrence of a poliencephalitis analogous to the polio-myelitis of infantile spinal paralysis, also the views which would make vascular changes primary. The spastic state in spastic paraplegia is then examined as to its dependence on degeneration in the pyramidal tracts or on arrest of development, in either case on an over action of spinal centres, the cortical influence being withdrawn. Even should the tracts prove to be normal, this theory would still hold, provided that the cerebral motor areas were at fault, and their controlling influence deficient.

The treatment of cases like the above is naturally somewhat disappointing, but the author draws attention to one or two points of importance, viz., to the tendency which some cases of traumatic paralysis in children show to

recover completely, without surgical interference, and to the greater prospect of recovery from aphasia in the child than in the adult. When the case is of long standing, will surgical interference, in the shape of brain operations, be likely to benefit a sclerosed or porencephalic brain, which, moreover, may coexist with undeveloped or degenerated lateral tracts? The author's question has but one answer.

Dr. Osler has done this work in his usual style, viz., well.

The Treatment of Epilepsy. By William Alexander, M.D., F.R.C.S. Young, J. Pentland, 1889.

In this publication Dr. Alexander places before the profession a new treatment of epilepsy—removal of the superior cervical ganglia of the sympathetic. In the opening chapters he gives the reasons which led him to adopt this treatment, the views, viz., as expressed by Hughlings Jackson, Gowers, and others, that the convulsive seizures of epilepsy are due to explosions taking place in the grey matter of the cortex cerebri, the instability of which is the result of malnutrition; the known relationship of the sympathetic system to nutritional states; and the suggestions already made by certain physicians that vascular states are intimately connected with epileptic discharges. The dangers which may attend the operation and the method of operating we are not competent to criticize—on this subject surgeons will have to express themselves—but we may state that Dr. Alexander maintains that the operation is very simple, and may be regarded almost as a minor operation, provided the surgeon first take the trouble to acquire familiarity with the steps of the operation by practice on the cadaver. The reports of twenty-four cases follow, and, briefly summarized, they give: cure in six cases, improvement in ten cases, no improvement in five cases; there were two deaths, but these were not directly connected with the operation. Concerning one case, subsequent details failed; the case was lost sight of. The cures "include only those cases where the disease has been arrested for two years or more, and where no medicine has been taken during that time." The statement "two years or more" should be, more correctly, eighteen months to two or three years.

The dangers of the operation being so slight, according to Dr. Alexander, there remain to be considered the possible after-effects of removal of the ganglia. These appear to be also very slight; they consist chiefly in eye-symptoms, and include

some contraction of the pupil and possibly some retraction of the globe, together with slight drooping of the upper lid. They are more noticeable in cases of unilateral operation, removal of one ganglion, than where both have been extirpated; indeed, in these latter cases the deformity is scarcely visible. Intra-ocular changes scarcely occur. We have this statement on the authority of Mr. Edgar A. Browne, whose report on eleven cases is tabulated on pp. 110-112. In three cases the powers of dilatation and contraction of the pupils do not seem to have been quite normal. It is of interest to compare the actual results of the operation with the experimental results obtained on animals of section of the cord of the sympathetic or removal of the upper ganglia. These results are given on pp. 108, 109. No changes in the urine followed the operation (p. 116); no noticeable changes in the temperature or vascularity of the surface were observed; no changes in the pulse. Dr. Alexander records an increased vascularity of the pia mater in two of the cases which died; but this would be difficult to establish, and must be taken *cum grano*. The author concludes that the operation probably acts by improving the nutrition of the brain.

Speaking as a surgeon, Dr. Alexander finds little value from the use even of bromides, though he does not deny their power to control the explosions. On page 142 he says: "So far as a cure is concerned, bromide is, as it is generally administered, the curse of epilepsy."

Other methods of treatment are touched upon, *e.g.*, the author's percussion and galvanization of the spine. In Chapter X. the general management of epileptics is considered, and insistence is made that homes for epileptics should be established. This suggestion is well worthy of consideration. In the same chapter he describes the home for epileptics at Bielefeld, in Westphalia; this would appear to be a most valuable institution.

We cannot reject another string to the bow in the treatment of epilepsy. We would, therefore, urge upon physicians and surgeons that they should weigh well this proposed new method.

Psycho-Therapeutics: or Treatment by Sleep and Suggestion. By C. Lloyd Tuckey, M.D. London: Baillière, Tindall, and Cox, 20 and 21, King William Street, Strand.

We have in a former number of the Journal reviewed the interesting work by Professor Bernheim, "On the Treatment of Disease by Suggestion," and we have indicated the stand-

point of the Nancy School of Hypnotism (Journal, January, 1889). Dr. Tuckey's little book is a rapid exposition of the same principles, and it is therefore unnecessary to enter at any length upon the consideration of the general character of this development and extension of the doctrines of Mr. Braid. Animal magnetism is, of course, entirely excluded from playing any part in the remarkable effects sometimes witnessed by acting continuously and systematically upon the mind of the subject by suggestions, calculated to excite expectation of recovery from disease or the amelioration of pain. It is obvious that any mode of treatment which aims at mental influence may be abused, and it cannot be denied that there is a danger of a number of lay persons attempting to cure disease by playing upon the most delicate instrument which can be subjected to another's influence. To what extent medical men will find that they can employ this system of suggestion in their practice is still doubtful. One thing is certain, that if it is to be kept from the hands of charlatans, it must be studied and applied by men belonging to, or under the immediate guidance of the members of the medical profession. Dr. Liébeault and Professor Bernheim have pursued an honourable course, and have done nothing to bring discredit upon this special form of treatment. Dr. Tuckey, who has dedicated his treatise to the former, has produced a very readable book, and no doubt has helped to increase the interest felt in the subject of the treatment of disease by suggestion in this country. It remains to be seen to what extent this system can be successfully applied to the treatment of mental disorders. We fear that up to the present time the number of cases of insanity permanently benefited has been of a very limited character, and we regret to find from Professor Bernheim himself that he has been greatly disappointed in this particular. We shall, perhaps, be better able to form an opinion on this subject after listening to the paper to be read in August at Leeds, by Dr. Voisin, "On Hypnotism in especial Relation to the Treatment of the Insane," and after the discussion to which it will, no doubt, give rise.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *English Retrospect.*

Asylum Reports, 1889 (*for* 1888).

Aberdeen.—The present asylum being much overcrowded and inconveniently near the town, the directors have purchased an estate of 283 acres, where they intend to provide accommodation and labour for a large number of patients accustomed to agricultural employment. As pointed out by Dr. Reid, this is a new departure in asylum management in this country.

The following remarks by Dr. Reid, on the occurrence of phthisis, are valuable :—

In the crowded condition that has existed in the asylum for so many years, phthisis would have been expected to predominate in the death statistics, but such is not the case. For instance, during the last ten years 28 are reported to have died from this disease out of an average population of 553·75 patients, thus showing the number of deaths from phthisis to average 2·8 per year. In the case of five deaths from this disease during the past year, two manifested its advanced symptoms when admitted. The only apparent reasons for the comparative infrequency of malady are as follows :—

The institution has many separate and detached buildings, affording classification of its inmates into different groups. The patients are distributed in sitting-rooms and parlours of moderate size, having constant access at pleasure to the open air, and not in large halls and galleries, with only periodic egress ; at the same time, by liberality of diet and warm clothing, they are able to combat the insidious effects of the east winds, while still enjoying the benefit of fresh air. Moreover, living in small groups, they are less liable to the evil effects of a contaminated atmosphere, and the day-rooms, from their size and position, are more easily ventilated than larger ones, with a greater proportion of patients of various classes. It may also be noted that the most disagreeable cases are isolated during the night in single bedrooms, of which there is a considerable number in the asylum.

Two deaths having occurred from virulent erysipelas, the drainage has been thoroughly overhauled, and all modern improvements introduced.

Barnwood House.—This hospital continues to exhibit every indication of energetic and successful management.

Dr. Needham's report contains the record of three cases of recovery after long continuance of the mental disorder.

1. A male patient in 1872, the subject of delusional insanity of a dangerous character, having had one previous attack ten years before. He remained under care in this hospital for many years, exhibiting continued evidence of the persistence of his delusions. Ultimately they began to be less and less obvious, his personal liberty was increased, and he regained the power of self-control, and a sane manner and appearance. This improvement continued until all trace of delusion had apparently disappeared, and he was discharged to the care of his friends in the spring of 1886. He has since remained at home free from all mental disorder, and able to enjoy life and manage his own affairs.

2. A male patient, admitted in 1874, suffering from delusional insanity of severe type. The delusions continued without intermission for many years,

when a distinct improvement became gradually apparent. The same course was pursued as in the previous case, with the result that all evidence of delusion and of general mental disturbance vanished, and he was discharged at the end of 1886. There has been no return of the illness, and after remaining under the constant observation of his friends until the autumn of 1866, he went abroad to begin life again in one of the colonies.

3. A male patient, admitted at the end of 1881, with delusional insanity and other symptoms simulating general paralysis. The prognosis seemed to be extremely unfavourable, and continued so until the end of 1886, when marked improvement showed itself in the entire disappearance of all delusions, increased mental vigour, and renewed general health. Personal liberty was enlarged, and in the autumn of 1887 he was discharged to the care of a medical man in a private house. He remained there for some months, when it was obvious that he had entirely recovered his mental health, from which there has been no relapse.

These cases, all of which were of the most unpromising kind, are full of interest in their relation both to prognosis and treatment. They illustrate the great importance of continued observation and treatment in even the most chronic cases, and the value of such individual attention as is only compatible with the care in one institution of a limited number of persons who are the subjects of mental disease.

We are sure that Dr. Needham will not resent the remark that he has omitted to state what the treatment was in these cases. Was it medical, moral, or a combination of both? Such cases have been frequently reported as occurring in large public asylums where minute personal treatment of chronic cases does not exist. So far as we know, there is no physician in existence who can lay down any but the broadest indications for the moral and medical treatment of such cases; and such treatment is followed in all well-conducted asylums, large and small.

We give Dr. Needham's well-balanced views relative to mechanical restraint:—

No mechanical restraint has been used during the year, and seclusion has been resorted to very sparingly, and only under exceptional circumstances.

With a sufficient staff of competent and experienced attendants, I consider these abnormal expedients to be practically unnecessary, and their frequent adoption to point to remediable defects which in no institution for the insane should be suffered to exist. Both of them are allowable as means of medical treatment under infrequent and exceptional circumstances, and a superintendent would, I think, be unwise who repudiated them altogether because they are unpopular, and, when abused, may lead to undesirable results. But he certainly would not be justified in their use from mere motives of economy, or to obviate defects in the number or quality of his attendants and nurses, or to save the trouble of resorting to more complicated, but less objectionable expedients.

It may be said broadly that the modern practice of approximating asylums as closely as possible, in the furniture and decorations, and in the absence of special asylum features, to ordinary dwellings, of removing unnecessary restrictions, and extending personal liberty as widely as is compatible with safety and public comfort, has done much to render such methods of management rarely necessary.

Berkshire.—The means of extinguishing fire have been considerably improved.

The Visitors mention in their report that they passed a resolu-

tion urging on Parliament the justice of inserting in that Act the claims of existing officers of lunatic asylums to receive pensions, either in the case of failure of health, or should they be over sixty years of age and have served for over fifteen years, and the Committee consider that in such cases the right to receive such a pension as is allowed by the existing Lunacy Acts should be assured to those who have spent the best years of their lives in the public service, and in a harassing and anxious occupation.

Bethlem Hospital.—Dr. Percy Smith's report is one of much interest, and is an indication of the wisdom of the choice made by the governors in appointing him the medical superintendent in the place of Dr. Savage. The report contains a reference to the discussion on mechanical restraint, which has recently attracted so much public attention and been the cause of an amendment to the Lunacy Bill, which is as uncalled for, as it is derogatory to the proper position of a medical superintendent. Dr. Smith supports, in a forcible and practical manner, the resort to mechanical restraint in certain cases as more humane than that form of restraint known as manu-tension, which the Lord Chancellor and the Lunacy Commissioners alike regard as non-restraint !

Birmingham. Winson Green.—The following paragraph from Dr. Whitcombe's report is an interesting addition to our information about statistics :—

> In annual asylum reports it has become common for medical superintendents to speak of the necessity for early treatment of insanity, and this goes on year by year apparently without producing the smallest effect. As bearing on this subject, it is interesting to notice the results of the past year. Table VII. gives the duration of the disorder before admission in respect of the admissions and recoveries; and it may be considered curious by some that the greatest proportion of recoveries shown there, namely, 64·7 per cent., is in the third-class, that is, recurrent cases of insanity of less than twelve months' duration. The next, 50·9 per cent., is in the first-class, consisting of first cases of less than three months' duration, followed by 40·4 per cent. in the fourth-class, being first and recurrent cases of over twelve months' duration. Now, in individualizing these cases, I find that the recurrent cases are sent to the asylum at a much earlier period than any others; the duration of the disease before admission being, in the majority of instances, one of days rather than weeks. Curiously enough, the same table shows that the death-rate, in proportion to the admissions, is in almost an inverse ratio to the recoveries; so that it may be plainly stated that the earlier a case of insanity is treated the greater the chance of recovery, and the less chance of death. [For "case" we should read *curable* case.]

We very cordially recommend the following paragraph to the earnest attention of every superintendent :—

> Comparisons are very frequently made by Committees and others between the cost per head per week in different asylums, and it appears to be fashionable for one asylum to vie with another as to which shall cost the less in this particular. I would ask, Is this true economy ? I cannot forget that the larger proportion of admissions into asylums yearly consists of those who are married, probably most of them "the heads of families," and I hold that the truest economy, the greatest saving of the public rates, lies in promoting the earliest recovery of these, rather than their cheapest maintenance. *A rivalry as to the highest*

recovery-rate, under similar conditions, might be more healthy, and be productive of good effects.

Birmingham. Rubery Hill.—It would be interesting to have further details of the two cases mentioned by Dr. Lyle.

Two of the recoveries deserve special notice, inasmuch as one had been ten years and the other eleven years under asylum treatment. They were both transferred to this asylum about six years ago, and were at that time considered beyond all hope of cure. I cannot but think that the change from one asylum to the other had something to do with the recovery, more especially being brought into the country air, with more facilities for outdoor exercise; but in one of the cases getting over the climacteric period played an important part.

Bristol.—The important additions and alterations to this asylum are still in progress. The new wings, mortuary, and workshops have been taken possession of.

In the following paragraphs we have Dr. Thompson's views concerning phthisis in asylums:—

Again, referring to Table IX., it will be seen that five patients died of consumption. I daresay that in an adult population one death in 12 deaths from this cause would not be considered out of the way. But as it has sometimes been alleged that consumption is a disease which is acquired by residence in an asylum, I think it well to try to refute that allegation. Three of the five cases were of an acute kind, and in the notes taken at the time of admission there is no mention of any symptom as existing then. But in the two which lingered, of one it is noted that a near relative died of that disease; while of the other case, who was admitted so long ago as 1864, there are ample notes of an attack which lasted over several years, and from which the patient evidently recovered, and of which there was no recurrence until a few months before she died.

That the presence of consumption at the time of admission, or a family history of its occurrence, is not uncommon, is a fact. My colleague, Dr. Harman Brown, has prepared for me a "return," taken from the notes of those admitted and readmitted during the past year, which astonishes me by the recorded frequency of family history, or symptoms, or both. Thirty women and 29 men are returned to me as having the one or the other. Thirty-three have a family history of consumption, of whom six have actual symptoms on admission, while in 26 others symptoms alone are recorded without any family history.

After seventeen years of experience in this asylum, I have come to the conclusion that consumption is the most curable disease which we have to treat. In many cases privation previous to admission is, doubtless, the cause of this special disease, as it is of the mental state; and good feeding, no doubt, and a change of circumstances all round for the better, has much to do with our success in arresting the disease, or in curing it altogether. Some of our success I attribute to the excellent automatic means which the building possesses, as part of its original design and mode of construction, which allows of a persistent, silent, and unpreventable current of air, cool in the summer and warm in the winter, to be going on whether we are awake or asleep. We know it now to be a fact that consumption seldom or never appears in a race of people until the race begins to build slated houses; and for that reason alone one landed-proprietor in the north of Scotland changed his intention to build slated houses for his poorer tenantry, and kept to the more primitive method of thatching the roofs.

Dr. Thompson refers to the consumption of tobacco in his asylum, and says that he has reduced it by two-thirds. Many asylum physicians will be inclined to consider his experience

unique when he is able to state that "the 'hardships' of leaving off is a sentimental matter entirely, as is shown by the fact that it rarely happens that a man newly admitted asks for tobacco until he has been about six weeks in the asylum, and then, probably, only because he sees others smoking."

Cambridgeshire, etc.—The additions to this asylum are still in progress.

There is no provision for isolating infectious cases. Dr. Rogers recommends the building of semi-detached cottages, to be occupied, as a rule, by married attendants, but available for hospital purposes when required.

Table V. does not state the number of post-mortems made.

Carmarthen.—A new church has been built apparently entirely by the staff and patients. This is extremely creditable. As to the value of work as an educational method we append Dr. Hearder's remarks:—

> Our first aim, our highest effort, is to promote recovery of mental health; but this can be successfully accomplished in only a minority of the cases admitted. There are few cases, however, who are not benefited by treatment, made more contented and comfortable in themselves, and more serviceable to others. The large amount of work that is performed in all asylums bears witness to this, and you have had considerable evidence of the value of asylum tuition in the large works which have been undertaken and completed here. The building of the new chapel for this asylum has been a work of education, and has raised many who were mere labourers into fairly skilled workmen. This, our largest undertaking, has now happily been brought to completion, without a single accident to life or limb. With the limited means at our command, it required that all engaged on the work, patients as well as attendants, should remember the injunction, "Whatsoever thy hand findeth to do, do it with thy might." Yet with all our home effort we have to gladly acknowledge the invaluable assistance of one, and only one, who is not a member of the permanent staff—our architect.

Cheshire. Chester.—The water supply showed signs of diminishing year by year, but deepening of the bore-holes has made it again ample. The estate has been increased by the purchase of thirty acres.

Cheshire. Macclesfield.—We gladly reproduce Dr. Sheldon's remarks upon cost of maintenance, and we venture to submit them to the careful consideration of some superintendents, though we do not endorse all his statements.

> The principle underlying the administration has been to reconcile economy of expenditure with full consideration for the well-being of the patients in matters of attendance, food, clothing, and medical treatment; it would have been an easy thing to either increase or diminish the cost of maintenance; as it is I do not think that the actual expenditure has erred on the side, either of parsimony or of extravagance. But to arrive at this moderate result has demanded unremitting attention to details of management on the part of your medical superintendent, and, at a time when the old order is passing, this induces me to speak of a danger which is threatening seriously to impair the usefulness of asylums; the burning question inside and outside them seems to be, not "What are you doing for the cure and care of the insane?" but "What does it cost to keep them?" The contention seems to be, not so much for improved methods

of treatment, for study of the symptoms and pathology of insanity, for progressive measures—such as an increase in the medical staffs in asylums, and the employment of a larger number of better-educated attendants—as for a rate of maintenance which shall approximate as closely as possible to that prevailing in workhouses; the temptations to such a course are obvious. When one considers the pressure which of late years has been exercised by representatives of the ratepayers, the applause which awaits response, and the criticism which follows resistance, to such pressure, they are almost irresistible. But the inevitable result is that the whole energy of medical men in charge of asylums is concentrated upon non-professional matters, and that institutions for the noble purpose of the cure and relief of disease degenerate into well-furnished poor-houses. It cannot be denied that a strong tendency to such a consummation does exist, and is likely to be intensified by the conditions under which the new order comes in. Personally, I would express a hope that the Committee soon to be appointed by the new County Authority to preside over this asylum may conceive a high notion of their work, and insist upon no degradation of it by their officers.

Cornwall.—Dr. Adams says :—

One man and one woman have been admitted, who, having been under observation for some time, and showing no signs of insanity, were discharged as "not insane;" the woman, who was under treatment here some years ago, was probably subject to a considerable amount of mental anxiety, causing excitement of a temporary character, which having passed before she was admitted left her in her usual mental state; the man, who has been repeatedly admitted here from various parts of the county, under different names, since his first admission, has shown no symptoms which would justify his being detained as of unsound mind. Whether his extraordinary behaviour which brings him under the notice of the police, and results in his being sent here, is really due to the fact that his mind for the time is off its balance, or whether he is only acting a part which he knows will be useless here, is a matter of doubt; he does not belong to the county, and professes to be a hawker, and to have no home or friends; possibly his habits have worn out the patience of those who were his friends, and there are now perhaps none willing or able to help him.

Cumberland and Westmoreland.—The following extracts from Dr. Campbell's report are somewhat long, but for this there need be no apology as they all refer to matters of interest and importance.

Epidemic Pneumonia :—

Seldom, if ever, in one year have so many cases of chest affection come under care here. Sixteen men and four women had pneumonia; six men died of this disease, those who died either had double pneumonia or had been known to have had previously an attack of the same disease. The cases occurred in both divisions of the house, though the majority were on the male side; the patients affected were nearly all living in different wards, some in separate buildings, and they did not work, when outside, at the same work, and the cases did not occur simultaneously. I could find no common cause except the cold and variable weather which we so long experienced during 1888. I first thought that the east wind had been the common cause, but Mr. Benn, who kindly supplied me with information from his observatory at Newton Reigny, has given me statistics to show that easterly winds did not blow with more frequency in 1888 than the average of the five preceding years; and from his information I find that only in eight cases was easterly wind prevalent at the onset of the attack. The periods of persistence in the early part of the year of east wind were considerable, and my experience is quite in accord with the old adage, "that when the wind is from the east, it is bad for man and beast." Very many people are rendered

exceedingly uncomfortable and even irritable during a continuance of east winds. The attention paid to the comfort of inhabitants of asylums, the regular mode of life enforced, the precautions taken against exposure, tend, I am certain, to make them more susceptible to the effects of cold than the ordinary home life of the same class. Several doctors in this county had a similar experience to mine as to the prevalence of chest affections during 1888.

Restraint:—

During the past year I have had two such exceptional patients under my charge that I had to make use of exceptional treatment. One patient, a young and active man of 6 feet 3¼ inches, was so powerful and violent that I had to keep him secluded for several periods. The other, a feeble melancholiac, made such persistent and varied attempts to kill himself that I had to restrain him by mechanical means for a long period, and when in no other way was it possible for him to injure himself, he bit off his lower lip as far as he could reach it with his teeth. This is only the second patient whom I have had to restrain for other than surgical reasons during the past fifteen years; when such cases occur, however, the proper course is to do what is for the good of the patient and the safety of those around him.

Employment:—

In county asylums I believe an advance of real value from a curative point, would result from an introduction of a larger number of day labourers, to whom convalescent and harmless patients could be entrusted during working hours, so that a class of work which would entail a greater call on the intelligence could be effected. At present in many asylums our patients are worked too much in large groups and have a tendency to get into a stupid, morose, and automatic condition which should be avoided.

Crichton Royal Institution.—This report affords every indication of enlightened and enterprising administration.

Concerning "boarding-out," Dr. Rutherford says:—

The majority of the pauper patients discharged unrecovered were boarded out in private dwellings. By the steady pursuit of this course in recent years the number of pauper patients belonging to the district has not only been kept from increasing, but has actually been diminished; to the advantage of those discharged, in their being enabled to live more natural homely lives, with freedom; to the advantage of those who remain, in enabling the medical staff of the institution to concentrate their attention on the class most capable of benefiting by it; to the advantage of the asylum as a medical institution, by freeing the wards of chronic harmless cases requiring no special treatment, and by making room for more necessitous cases; and to the advantage of the ratepayers in lessening the cost of maintenance of the lunatic poor. We are thus at this time in a position to afford temporary accommodation to the parishes of neighbouring districts, pending the erection of their new asylums. The following table shows the total number of southern counties district patients admitted, discharged, and remaining resident during the last twenty years, in four quinquennial periods:—

	Admitted.	Discharged.	Died.	Remaining.
				252 December 31, 1868
1869 to 1873	246	148	90	260 „ „ 1873
1874 to 1878	307	175	94	298 „ „ 1878
1879 to 1883	332	239	129	262 „ „ 1883
1884 to 1888	349	268	97	246 „ „ 1888

The significance of this statement is best seen by a comparison with other districts. This can easily be done by referring to the Lunacy Blue Books.

The advantage to the ratepayers consists not only in the difference between

the amount charged by the asylum and by the guardian, but also in the diminution of the total number of lunatics chargeable. Many persons will complacently allow their nearest relatives to be supported by the parish so long as they are confined in the asylum, but when it is discovered that they can live out of it, they make the effort, which in many cases is simply their duty, to maintain them.

The number of private patients has largely increased, and the amount of charitable assistance extended to deserving cases is most commendable.

The adjoining property of North Rosehall has been purchased. It extends to 110 acres.

The out-door employment of the gentlemen has been systematized and extended.

Death has made the first break in the little community of twelve patients, who for four years have lived quietly and contentedly in the two cottages at Spitalfields, without any attendants and managing entirely their household affairs. The origin of this little colony was the effort begun in 1883-4 to reduce the number of pauper patients in the second house by the boarding-out of suitable cases, with the result already referred to. Some female patients then sent out were returned to the asylum as unmanageable in private dwellings, and for some others suitable guardians willing to take them could not be found. To show practically that these patients did not really require the skilled attendance and costly accommodation of the asylum was my object in making the experiment, and it succeeded so well that it has gone on for four years, until the death of the old woman who took the principal charge of one of the cottages suggested the idea of replacing her by an attendant who is advanced in years, no longer fit for full work, and who would rather remain in service, with lighter duties, than accept a retiring allowance. The characteristic feature of this little community is, therefore, for the present at least, destroyed. But I do not think the experiment, which has been entirely successful, should disappear into the past without record.

Derby.—As usual, Dr. Lindsay's report is a careful and thoughtful production. In it he records the following interesting surgical case :—

T. W. S., an idiot and epileptic, 30 years of age, on the afternoon of 27th October was found to be unable to swallow solid or liquid food, and the asylum medical officers on examination diagnosed a chestnut firmly impacted in the gullet at about the level of the collar bone. The patient was not seen to swallow the chestnut, and he had not sense enough to give any information, but the use of the probang and œsophageal tube, added to his known habits, enabled the medical officers to diagnose a chestnut in the gullet. This being a case of danger and difficulty, necessitating a surgical operation, Mr. C. H. Hough, one of the surgeons of the Derby Infirmary, was called in consultation, who next morning, 28th October, skilfully and carefully performed the operation of œsophagotomy, and removed a large chestnut measuring $3\frac{3}{4}$ inches in circumference, and weighing over half-an-ounce, which was firmly impacted in the gullet, at about the level of the clavicle. He appeared to progress satisfactorily until 1st November, when he died rather suddenly, with a gush of blood from the mouth, the cause of death being hæmorrhage into the stomach, which was nearly full of blood.

It is extremely satisfactory to find that asylum physicians are becoming alive to the, we may say, immorality of the competition hitherto followed in many places to reduce the cost to the last farthing. This is an evil we have more than once pointed out, and it would appear that the warning has not been in vain.

There is, I believe, too great a tendency, and the rivalry appears to be growing in some quarters, to claim credit for a low maintenance rate, obtained too often probably by sacrificing the patients' benefit. A very low maintenance rate requires careful scrutiny, should be viewed with suspicion, and is not, in my opinion, a thing to be commended or to boast of. The insane require a generous diet and liberal treatment, and it should ever be borne in mind that an asylum is a hospital for the insane, which should not be allowed to assume the character of a second-rate workhouse. All due regard should be paid to economy, but the patients' interests ought to be the primary consideration, and must not be allowed to suffer.

The dietary has been improved. The water supply appears to give much trouble. In his report Dr. Lindsay refers to the question of pensions to asylum officers.

Devon.—Important structural additions have been made to this asylum. The accommodation for female patients has been extended. A dining-hall for 400 patients has been built, and the recreation-room has been enlarged.

Dr. Saunders gives a short history of the asylum since its opening.

The report of the Commissioners is not given.

Dorset.—In his report Dr. MacDonald pleads the cause of the senile, the idiotic, and imbecile. Concerning the former, he says:—

Many of these patients are examples of hard working, industrious men, whose minds broke down under the changes natural to advancing years, and other collateral causes. It has been, and is, said that many of these cases "might be looked after at home." Now, with the spirit of this remark or expression of opinion, I am in full sympathy, and it is a matter for regret that our wards contain so many chronic dements; but is it possible, or even practicable, to treat such cases in their respective homes? In the majority of the cases the nurse would have to be the wife, herself may be feeble in mind and body, and, probably, more in need of being nursed than to act as one; and, for these reasons, ill-suited to look after or nurse the peevish, irritable, and fractious mind of a worn-out husband. To expect the children or other relatives to accept the responsibility, however laudable, is often unreasonable, and as impracticable as in the case of the wife. To send these cases to the workhouse, where no special means of treatment is provided, does not commend itself to those who know the trouble and trial such cases often are. In the interests of these too often mental and physical wrecks of humanity, I hope that no mistaken or erroneous notion of how they might be treated will prevent their early removal to the asylum, where, if not cured—for they cannot be renewed—they are at any rate nursed and taken care of.

Exeter.—Dr. Leonard Rutherford reports that two males and one female were discharged as not insane. One male had previously been in the County Asylum; he had too much drink in Exeter one day, was arrested by the police, and sent on here. The other male was sent from Woolwich by order of the Secretary of State; he was a soldier, and feigned insanity in order to procure his discharge. The female was a private patient, and in Dr. Rutherford's opinion ought never to have been sent to the asylum.

A male patient, S. J. B., made a murderous attack upon another patient with

a piece of sharpened iron, inflicting three severe wounds on the head, which fortunately did not prove fatal; he was arrested and committed for trial, but being found insane on arraignment was ordered to be detained during Her Majesty's pleasure; he is now in the Broadmoor Criminal Asylum. Such an occurrence as this is a source of considerable solicitude, and gives rise to a painful feeling of insecurity amongst the staff generally. It must never be forgotten that no lunatic is harmless in the proper acceptation of the term, but may at any time injure himself or others by physical violence.

A detached chapel is now in use. The report contains a photograph of the front of the asylum. It seems to be a very elegant building.

Dr. Rutherford inserts a very useful table—quite new so far as we know. It shows the weights of the patients on admission and on the last day of the year.

Glamorgan.—Concerning phthisis, Dr. Pringle reports that nineteen died from that disease during the year. Eleven of the cases were admitted suffering from the disease, and in the other eight it appears to have originated in the asylum. Of the total mortality since the opening of the asylum, consumption had caused only 15 per cent., whereas the average in asylums generally from this disease is 25.

During the County Council elections Dr. Pringle and his asylum appear to have come in for some very unfair criticism. He replies to this at considerable length, and the following are a few sentences therefrom:—

> Your medical officers are fully alive to the importance of doing all that is possible for the cure and alleviation of their patients, to whom extra food, wine, cod-liver oil, and the most expensive drugs are freely given whenever they think them needed or likely to benefit. In this institution your patients have ever been regarded as *sick* men and women, not slaves, to toil unceasingly in order to keep their maintenance down to a workhouse rate; and I do not covet the questionable honour of making this asylum the cheapest in the kingdom. If such a position can only be attained by stinting and driving the patients, paying the attendants and nurses so poorly that they are constantly changing, and cannot, if married men, live comfortably and respectably, then I think few, even of the poorest ratepayers, would desire such a price to be paid. A good attendant of some years' standing, ought, by reason of the delicacy and danger of his work, and the mental and moral qualities required, to be at least as well paid as a first-class constable, and yet in how few asylums is he so remunerated. . . . . To compare, as has frequently been done, this asylum with one much cheaper is utterly unfair and misleading, unless their relative advantages and disadvantages are known and duly weighed. Judged by this standard, I do not consider this county has any reason to be dissatisfied.
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> When I was appointed, fourteen years ago, your medical superintendent, the cost of the patients was 10s. 6d. a week, and although it is now 2s. 6d. lower and below the average of County Asylums generally, I have been, as you are aware, frequently reproached of late for not keeping the patients more cheaply. Now, so long as this abuse proceeded from discharged servants and other irresponsible persons I took no notice of it, but as recently a member of this Committee, who, however, knows hardly anything of the institution, and has only been two or three times at your meetings, has taken up this cry in addressing his constituents on his candidature for the County Council, I think it is time to speak out and place on record my earnest protest against a system of

competition which is cruel to the patients and degrading to the officers who carry it out. An asylum is emphatically a hospital, not a trading institution; and whilst all due economy should be studied, the officers ought not to be made to feel that they are under a ban if the expenses are not kept down to the lowest point possible, and frequently, I fear, only attainable by illiberal treatment of the most unfortunate class of humanity and of those who have the care of them.

Glasgow Royal Asylum.—The number of beds reserved for pauper cases has been reduced by thirty, thus providing more accommodation for private patients of the poorer class. Cottages have been provided for married attendants. Arrangements are in progress for the introduction of the electric light.

Dr. Yellowlees appends to his report an interesting, though brief, account of the early history of his asylum. We quote only a couple of sentences.

> It is a genuine pleasure to recall the Christian sympathy, the enlightened philanthropy, and the practical wisdom of the founders of this institution. Their views were far in advance of the age, and supply a wholesome rebuke to the too prevalent spirit of to-day, which weakly worships novelty and notoriety, and loudly proclaims a discovery when it has only called an old truth by a new name.

Gloucester.—Concerning the transfer of incurable cases to workhouses, Dr. Craddock says :—

> The practical outcome of all these considerations is that where a number of patients, who it was thought might be safely dealt with in workhouses, have been sent thither from an asylum, it has almost invariably happened that a large majority have been returned to the asylum within a very short period. There are always plenty of patients in every asylum ready and anxious to be transferred to the workhouse, but it generally happens that they are least suited for such a location, while the quiet chronics who might do in a workhouse often have the very strongest objection to being sent there, and if actually sent there against their will generally contrive to so conduct themselves as to render it necessary to return them to the asylum.

Reference is made to that difficult subject—the proper mode of dealing with young idiots.

Two outbreaks of fire occurred during the year. Neither appears to have been very serious, no doubt owing to speedy discovery, and the appliances on the spot were sufficient on each occasion.

Hants.—Two large cottages have been built as detached hospitals. Each can accommodate six patients. Mess rooms for the attendants and nurses have also been provided.

Beer as an article of diet has been discontinued. The Visitors report :—

> In upwards of fifty asylums in the United Kingdom and Ireland no alcohol is used except for medicinal purposes, and the large majority of superintendents hold they have obtained thereby very beneficial results, less quarrelling and discontent, improvement in health among the patients, besides better discipline.

After an interval of twenty-one months, typhoid fever again broke out.

Only three cases occurred in the first half of the month (July), but between the 15th and 31st fifty-one people were attacked, and in the following fortnight twenty-one more sickened, when the epidemic ended. In all, four attendants, twelve nurses, twenty-five male and thirty-four female patients suffered from the disease. I am thankful to be able to report that the mortality was very small; only four deaths took place, namely two male and two female patients, or 5·3 per cent. of those who had the fever. None of the staff died, but five of the nurses and one attendant suffered from a severe form of the disease. There were several critical cases amongst the patients, but the majority of them were mild in character. One uncommon point in the epidemic was that four patients, each over 70 years of age, suffered acutely from the malady. They all made good recoveries.

In Dr. Worthington's opinion there could be no doubt that the disease was due to pollution of the water by sewage.

Hereford.—Dr. Chapman's report is, as might be expected, a very careful and valuable production.

It is pointed out that twenty years ago, one-third of the pauper lunatics of Herefordshire resided with their relatives, whilst now only one-sixth of them do so. This is a change which has occurred in most if not all counties. To avoid the concentration of patients in asylums, Dr. Chapman thinks that much might be done if Boards of Guardians would take the matter up, and especially if they would give more liberal allowance to such cases. Against this course, the 4s. grant, continued under the Local Government Act, is a distinct bribe. An allowance of 5s., 6s., or 7s., is recommended by Dr. Chapman. He believes that few cases with relatives or others now receive above 2s. 6d.

One, and the chief alteration required to meet these two points, is to place all pauper lunacy under the care of the County Council, who should have power to determine as to each patient, whether he should be placed in the asylum, in the workhouse, or maintained "with relatives or others," with power to order the allowance in the latter instance and to arrange for adequate inspection and supervision. Only in this way can a limit be put to indefinite enlargement of the asylum, to the extravagance, for persons not requiring it, of maintaining at the expense involved in asylum treatment, the increased numbers, and to the cruelty (this is hardly too strong a word) of removing from home and friends, locking up in an asylum, and associating with all classes of lunatics, persons for whom such a course is unnecessary.

Erysipelas :—

I feel each year more forced to the conclusion that erysipelas that appears at intervals is not due to any drain defect or matter of that sort, but to local contamination of the floor of the wards or of the basements beneath; the number of patients of faulty habits is so large that in portions of the asylum cleaning is hardly completed before it has to be repeated, so that though perfectly clean and dry to the eyes, all chinks and porosities are in great danger of remaining both filthy and damp.

Patients in bed :—

One result of the large proportion of feeble patients is a great number of cases more or less confined to bed. We have a great many cases who are necessarily in bed, and others that would, I believe, in many asylums be got up—but in my opinion are equally necessarily in bed. I have always failed to see why a patient

in need of rest, and who would be confined to bed owing to his ailments and debility were he sane, should not equally be kept in bed when he is in an asylum, and I have always considered that the low mortality of this asylum, among other causes, is tended to by this principle being admitted. One has, no doubt, to be always jealously alive to consider whether, in certain cases, where troublesome excitement is present, the patient is being kept in bed for sound medical reasons, or merely as a lazy way of getting rid of the difficulty of managing him. Cases where this point requires consideration are, however, but a small proportion of the cases that fill our beds. The desirability of avoiding this mistake seems to me to be met, after all, in a very lazy and pernicious way, when a hard and fast rule to get everybody up is acted on, *and where, as is by no means uncommon, a patient known to be dying is got up and dressed, up to the very day of his decease.* (Italics are ours.)

In the present state of the law Dr. Chapman will not discharge convalescent patients on trial. He gave up this method of discharge many years ago when he found that he was responsible for patients of whom he had no knowledge, and who in several instances became seriously dangerous to themselves and others a considerable time before he had any information about them.

As to accidents, he says :—

The only accidents and injuries of any moment to patients during the year were a dislocation of the shoulder and a fracture of the upper arm, both in female patients and both from accidental falls. I do not know what the practice in the majority of English asylums is, but in most Scotch asylums I believe only injuries of this severity are recorded. It has always been my habit here to record in the statutory journal every injury, however trivial. They amount to an average of about one per diem, or, say, one per patient per year. They are chiefly trifling scratches and bruises, such as most of us get that number of, with a certain proportion of more severe black eyes and cuts, chiefly from falls in fits, accidental falls, and collisions between patients.

Holloway Sanatorium.—Many important structural alterations have been made, and others are projected—all tending to render the building suitable for its uses. The number of patients has largely increased, and, financially, the establishment is successful.

In the last report mention was made that an application had been made to the Charity Commissioners for advice in consequence of an obscurity in the original Trust Deed. After full inquiry, the Charity Commissioners have prepared and passed a scheme which permits the General Committee to manage the Hospital in accordance with any regulations which may be from time to time approved by one of Her Majesty's principal Secretaries of State, and which lays down certain rules to govern the charges made for patients' maintenance. Broadly, the rule made by the Charity Commissioners is to the effect that the weekly rate for one half of the patients on the books is not to exceed two guineas, and that of those patients whose rate is not to exceed two guineas, one half shall be received at weekly rates not exceeding twenty-five shillings. The scheme seems a just and liberal one, and will prevent the objection which has been advanced, namely, that some of the hospitals are conducted as money-making concerns and in rivalry with private asylums.

Hull.—Dr. Merson is unable to explain the fact that the proportion of general paralytics admitted into his asylum is higher than in any other in England.

Ipswich.—When the Commissioners made their last visit they remarked that at dinner each plate had a tin cover. This we think is an arrangement which might with advantage be introduced into all asylums.

Lancashire. Whittingham.—Dr. Wallis lectures to his nurses and attendants on nursing of the insane, and instructs them also in ambulance work.

All the causes of death were verified by post-mortem examination. If the relatives refuse consent, the death certificate is withheld, and the coroner gives his order for an examination. If we may be allowed to express an opinion we would say that such a proceeding is oppressive. Although the coroner is endowed with large discretionary powers, we question very much if such an arrangement as exists in this asylum would be considered reasonable, or indeed lawful.

Concerning pensions to attendants, Dr. Wallis says :—

> The duties of the attendants are very trying, and it is not to be wondered at that many are found wanting, and others give up in disgust. The average chronic lunatic is exceedingly uninteresting, selfish, and ungrateful. There are, no doubt, cheering exceptions, but many of them are crafty or cruel, vicious, and objectionable in temper and ways to those who have the charge of them. The privileges of the attendants are not excessive, while their hours of duty are sadly too long, and the recent outcry against pensions, in connection with the County Council Elections, has made a strong and most unfavourable impression upon the minds of the best and most steady of them. Should the hope of pension (which has always been granted in the past and has been looked upon as a certainty) be removed, the strongest inducement to persevere in the service will be gone, and the personal quality of the asylum attendants will inevitably deteriorate to the serious detriment of the patients.

Lancashire. Lancaster.—The following paragraphs are extracts from Dr. Cassidy's report. They refer to diet, amusement, and massage :—

> All the patients in this asylum, non-workers as well as workers, have four meals a day. The laundry workers have, in addition, afternoon tea in the laundry. It is impossible that any patient can complain of insufficiency of food here. The usual asylum grumbler, who is never wanting, has, therefore, to base his complaints on other grounds.
>
> I find, under the head of amusements, we had no less than 266 indoor entertainments in the year, consisting of pantomime, plays, concerts, dances, sociables, etc., and, in addition, about thirty cricket matches were played with neighbouring and other asylum clubs, and witnessed by large bodies of patients. Few asylums do more, I think, under that head, and few, I think, encourage the harmless and social meeting of the two sexes to the same extent. I have found no harm arise from this latter practice, doubtless because it is always carefully watched, but a great deal of contentment and good feeling is beyond question produced. Besides these influences, such others as music, considered apart from amusement, decoration, birds, pictures, and flowers, have effects altogether good upon the mind diseased, and the money cost seems trifling when we consider all the misfortune we are trying to alleviate. Moreover, in a great many instances, the cost of maintenance here is wholly or in part repaid to the unions by the patients' friends, who have in that, and indeed in any case, a right to demand that we apply every resource in our power. An asylum is

not a workhouse. There is a radical difference, notwithstanding the similarity in the terms between pauper and pauper lunatic. It differs also in these material respects from both workhouse and general hospital: the patients are involuntary inmates, their liberty is curtailed, their treatment is prolonged —in many cases for years—their associations are naturally depressing, and their minds only too ready to take their cast from their surroundings, the melancholics * contemplating suicide, and the excitable to be thrown on their own turbulent resources. The least we can do, then, is to make the wards as cheerful and comfortable as possible, and to import as much interest as possible into the daily life of the asylum. The Americans are in advance of us in many asylum matters, and among other things I notice in a recent report of an American asylum that "a lady in charge of the music for the male side of the house visits this building (an annexe) every day, and entertains the patients with music."

I am again trying massage as a mode of treatment, particularly for melancholics, and can report very favourably of it. In a few years, I venture to predict, massage will be generally employed in our asylums; and as I was the first to mention it in connection with asylum practice, I venture to suggest that it be tried in conjunction with douches—hot and cold—as at Aix-les-Bains.

Lancashire: *Prestwich.*—A considerable portion of Mr. Ley's report is devoted to recounting the history of the asylum since its foundation. There are, however, other portions of more interest to non-Lancashire persons, and these we proceed to notice.

It will appear that a great evil continues to flourish in Lancashire in spite of all that Mr. Ley and others have said against it:—

A large proportion of the pauper insane are, in the first instance, remanded to the workhouse, the duration of their stay there frequently depending upon the character and form their insanity assumes. So long as these patients are quiet and give no trouble, they remain in the workhouse until, in the natural sequence of things, they begin to degenerate and acquire offensive habits, when a home is found for them in the County Asylum. The large workhouses in this district provide an aggregate accommodation for 1,300 lunatics, forming a reserve of mental disorder from which, in a large measure, this asylum draws its supplies. From time to time, these workhouses empty their surplus population into our wards, and it is mainly from them that we have received during the past year, and each year since the opening of the annexe, so many cases of chronic insanity in its most hopeless forms.

Type of insanity:—

The type of insanity has of late years markedly changed, and many kinds of mental disorder, such as epilepsy, general paralysis, and its allied forms of structural brain disease, which may be termed incurable from the day of their development, are more common now than formerly. Insanity, associated with epilepsy, such as is met with in asylums, is nearly always incurable, and general paralytics are a class who usually go from bad to worse. The statistics of this asylum show that the proportion of patients suffering from organic brain diseases among the admissions have more than doubled within the last twenty years. Nearly twenty-five per cent. of the male admissions of 1888 were cases

* The too common habit of spelling the word in this way seems to us regrettable. Why not spell it melancholiacs, uniformly with maniacs and hypochondriacs?

of general paralysis, a disease which, while comparatively unknown in Ireland, Scotland, and among rural populations generally, is prevalent in an increasing extent in Lancashire, Middlesex, and elsewhere where the proportion of urban population predominates. It would appear as if the general tendencies of civilization, in large cities and populous manufacturing districts, are such as to exhaust nervous vitality and predispose to structural nervous degenerations. The Irish peasant, in his native country, has a marked immunity from these fatal forms of brain disorders, but when transplanted into centres of labour and activity in Lancashire and Middlesex, he is often apt to break down and acquire a form of mental disease, progressive in its nature, and little susceptible of cure. So increasing is this form of insanity among the inhabitants of crowded communities that the recovery rate in an asylum drawing its supplies from these centres will, no doubt, be seriously modified by it in future. This disease is principally confined to the male sex, but of late years has become more prevalent among women. No less than twenty-six, or six per cent. of the total female admissions last year, were suffering from that fatal form of brain disorder.

Leicestershire and Rutland.—Some structural improvements have been effected, including readier means of escape in case of fire, from the observation dormitories.

Lincolnshire.—Dr. Palmer has been succeeded by Mr. Marsh, who had acted as assistant medical officer for seventeen years. We are pleased to find that the shabby treatment experienced by Mr. Marsh is condemned by the Commissioners. His salary is only £400, and on appointment as superintendent he agreed to waive all claim for retiring pension in respect of his past seventeen years' service. Such treatment we consider abominable.

The sanitary condition of this asylum appears to have been rather unsatisfactory for years, but during 1888 an exceedingly severe outbreak of typhoid occurred. In all, 101 persons were affected, and of these no fewer than nineteen died. Examination disclosed a shocking state of affairs. Nearly every sanitary abomination flourished, and it is remarkable that typhoid fever and dysentery had not long ago rendered the place a pest house. For details we refer to Mr. Marsh's report.

London.—The estate has been increased by the purchase of 107 acres of land at a cost of £8,000. It will now be possible to undertake the necessary enlargement of the building.

It is evident that many important improvements have been effected since the present able and energetic superintendent, Dr. White, became superintendent.

Between May 1st and 9th, thirty patients and eleven attendants were attacked by a very acute form of diarrhœa. Although all articles of diet were carefully inspected, and the milk and water analyzed by competent experts, Dr. White was unable to trace the origin of the disease. The well was also thoroughly examined.

Six cases of typhoid occurred, one ending fatally. A leakage in the main sewer appeared to be the origin of the disease. The root of a poplar tree had severed its continuity, and at last the main had become blocked by a growth of this root in its interior.

We are extremely pleased to hear that the lectures to attendants have been continued.

In the following paragraph Dr. White records an event probably unique:—

On July 11th, Herbert Thackeray King, a patient who had been transferred to another Home County Asylum on May 29th last, burglariously entered the female division of this asylum at two a.m., and, armed with a razor, attacked the female night attendants in the execution of their duty. After considerable difficulty he was secured and handed over to the police of Dartford. I found, on inquiry, that he had been discharged recovered from the asylum mentioned only three days prior to this event. On July 18th King was tried at Maidstone Assizes and found guilty on five counts, but as he was judged insane at the time of the crime, he was ordered to be detained during Her Majesty's pleasure, and sent to the Criminal Asylum at Broadmoor.

Mavisbank Asylum.—Concerning the form of mental disease, Dr. Keay says:—

In a large proportion of the cases admitted, mental depression was the prominent symptom. Fifteen suffered from acute melancholia, and most of them had suicidal tendencies. A typical case of acute mania did not occur. A similar preponderance of cases of mental depression was reported last year, and the same thing has been noticed in other asylums. There can be little doubt that amongst the educated classes melancholia is the commonest form of insanity, and that acute mania is rarer than it used to be. This may be looked upon as an instance of the general "change of type in disease" which is said to have taken place during the last sixty or seventy years, for it is just as likely that this change of type has occurred in diseases of the brain as in those of other organs. The higher state of civilization reached by a nation, the more complex and delicate in organization become the brains of its units, as they in increasing numbers live by their brains, rather than by their hands. In these highly organized brains the mental disorder takes the form of melancholia rather than of mania. Nearly all the patients were, on admission, in impaired bodily health and reduced condition; they required a liberal dietary, good nursing, and tonic treatment. They were examples of disease in its modern type. They were not cases of the old "sthenic" form, in which measures of the opposite kind would have been indicated; such cases are now rarely seen.

Middlesex. Hanwell:—

Fully aware that a feeling inimical to pensions is nowadays becoming more and more prevalent, the Committee believe that, in a lunatic asylum, there exists no occupation where these rewards for good and faithful services are more needed and deserved.

The Committee pay a very high compliment to the official conduct and personal character of Dr. Rayner on his resignation from bad health, but no expression could be too warm for a man universally admired and loved. We consider his removal from asylum work a real loss to our Association and to medicine generally.

Mr. Richards thinks that the form of mental disease of the new cases, as compared with previous years, has varied somewhat, as there has certainly been a marked increase in the number of cases of melancholia. In those cases of delusional insanity which com-

prise the greater proportion of the recent admissions, the idea that they are being worked upon by galvanic or telephonic influences largely predominates. There were only five cases of general paralysis of the insane.

Dr. Alexander is able to report that only one death from phthisis occurred among the male patients during the year. He thinks that the discontinuance of scrubbing has materially reduced the number of cases of diarrhœa. Beer has been withdrawn from some 270 patients, and the result is reported to be satisfactory.

The hot-air bath referred to in the last report has been in use during the greater part of the year. I look upon it as a very valuable addition to our curative agents for the treatment of gouty and alcoholic cases. I hope to increase during 1889 the number of cases under this form of treatment, due and careful regard being paid to the suitability of the patients selected.

Murray's Royal Asylum, Perth.—The new buildings have been planned in a very satisfactory manner, and there appears to be every prospect that the future of this institution will owe much to the present vigorous and judicious administration.

Surrey. Brookwood.—This asylum is full, and it has been necessary to refuse several applications for admission.

Typhoid fever was imported by a female patient. The disease subsequently attacked a night-nurse and four patients, one of whom died.

It is reported that the Improved Porter-Clark Water Softening Apparatus has proved successful. The hardness of the water has been reduced from 16 to an average of 5 degrees of hardness.

Dr. Barton is of opinion that "the continued depression in trade and agriculture influenced to a great extent the character of the insanity. There was a marked decrease in the acute and uncomplicated forms from which the greater proportion of the curative class is drawn, and a corresponding increase in the number of melancholics and dements."

Twenty-three cases were discharged to the care of friends. Dr. Barton says that he is always willing to encourage these discharges provided the patients are sufficiently improved to allow of their friends taking the responsibility of their care, for he considers that there is always a chance of the patients being stimulated to further mental improvement by trying to maintain themselves at home, even for a time.

Surrey. Wandsworth.—After a service of 30 years, Dr. Biggs has retired and been voted a pension of £974 per annum. He is succeeded by Mr. H. Gardiner Hill.

We notice that the report of the Lunacy Commissioners is not given—an important omission.

Sussex—This asylum is full. As the process of weeding out incurable cases seems to have about reached its limit, a second asylum for the county will soon be required.

To further protect the building from fire, the storage of water

has been largely increased, and at various places party walls have been carried up through the slates.

With Dr. Saunders' remarks about post-mortem examinations we cordially agree. He says :—

Post-mortem examinations were made in 44 cases, and no pains are spared to overcome the objections of the patients' friends to such examination, but in many cases without success. Great stress is laid, in certain quarters, on the desirability of submitting every case of death to post-mortem examination; but the feelings of the survivors ought to be most fully considered, and to perform an autopsy without the friends' knowledge and sanction is a most injudicious, if not illegal act; and yet it is difficult to reconcile some asylum records with the belief that in them such permission is obtained.

Warneford Asylum.—A new wing for male patients has been built, and is being comfortably and substantially furnished.

Warwick.—Dr. Sankey reports that seven cases of dysentery and typhoid fever occurred on the male side. He says that he is at a loss to account for the outbreak, unless it be that there is insufficient room for the number of patients resident, and insufficient means of at once isolating cases of diarrhœa immediately on its supervention. We think this to be very unlikely. If the sanitary defect be looked for more carefully it will be discovered.

Wilts.—A detached hospital is nearly ready for occupation. A plan of the building accompanies the report.

The asylum is quite full. In his report Dr. Bowes deals with the increase of insanity in the county.

The following table shows the growth of pauper insanity in this county with the disposal of the insane paupers for every ten years since the opening of the asylum :—

Year.	In County Asylum.	In other Asylums.	In Work-houses.	With Friends.	Total.
1851 ...	165	67	84	91	407
1861 ...	366	3	119	177	665
1871 ...	456	13	136	201	806
1881 ...	613	10	184	151	930

The percentage of lunatics in Wiltshire confined in the County Asylum amounts to 68·9; in workhouses in the county, 18·1; and with care of friends, 13·0. The average percentages throughout England are—In other English asylums, 71·2; in workhouses, 19·0; with friends, 9·7. From these figures it will be seen that the percentage under treatment in the County Asylum of Wiltshire is below, and the number in care of friends considerably above the average. The number in Wiltshire workhouses is one per cent. below the average. It has become a thoroughly recognized fact in this county that the want of accommodation and absence of supervision in workhouses entirely unfits these institutions to receive and keep in safety and comfort persons of unsound mind, and little encouragement is offered or requisition made for the discharge of patients for this purpose. The following table gives the population of Wilts in the three years named, with number of lunatics in the county and the ratio of lunatics per 10,000 of population :—

Year.	Population.	No. of Lunatics.	Ratio per 10,000.
1861 ...	249,311	665	26·67
1871 ...	257,184	806	31·33
1881 ...	258,965	958	36·99

In 1861 there was, therefore, one lunatic to every 375 of population, and in 1871 the proportion increased to one in 319, and at the last census (1881) the proportion amounted to one in 271. These figures speak for themselves, and, compared with similar returns from other counties, it is found Wiltshire stands third in possessing the highest number of lunatics in proportion to population. Two other counties have proportions of one in 243 and one in 246 respectively. The proportion is highest in agricultural counties and lowest in Northern and Midland counties. Two of the latter present proportions of one in 576 and one in 574. This fact points to low wages and deficient food as being an active generator of insanity in agricultural districts.

Wonford House.—The estate has been increased by the purchase of thirty acres of land at a cost of £7,250. This will permit of various improvements, among others, the erection of detached villas and cottages.

Worcester.—Although this asylum appears to be in a thoroughly efficient state, the weekly cost per patient during last year was only 6s. 11½d.

York Retreat.—One of the good things done at the Retreat has been the introduction of the Turkish Bath. Instead of commenting on this and other features of the institution we refer the reader to Dr. Baker's article on this mode of treatment in the current number of the Journal.

Yorkshire. East Riding.—A portion of Dr. Macleod's report is devoted to a short account of the asylum since its foundation.

Yorkshire. North Riding.—A new building to accommodate fifty female patients is nearly ready for occupation. New shops are in use.

The final report of the Committee gives a short history of the asylum since its foundation.

Yorkshire. West Riding. Wadsley.—Small-pox attacked eleven patients, two of whom died.

To be under the supervision of one medical superintendent this asylum has long exceeded its proper size. During part of the year the number resident was nearly 1,700. Can it be a matter of wonder that Dr. Mitchell sank under such a burden?

Dr. Kay reports that the introduction of Perkins' system of heating by hot water under high pressure has been attended with very gratifying results.

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2. *German Retrospect.*

Pathological changes in the Brain in Dementia Senilis.

S. Beljahow communicated to the Psychiatric Association of St. Petersburg his observations on four brains of senile dements ("Neurologisches Centralblatt," No. 3, 1887). Three of these subjects were women. The weights of the brains were 1030, 1035, 1080, and 1100 grammes. Their ages ran from 64 to 75 years. The pathological alterations were similar in all the four

cases. There was hardening of the cranial bones; in some cases the diploe had entirely disappeared. The dura mater was found united with the cranium; there was also pachymeningitis hæmorrhagica. The pia mater was thickened, and when detached from the cortex brought away a portion of matter with it. The convolutions were slender; the fissures wider than usual; the cortical portion of the brain diminished in thickness; the vessels of the base of the brain, especially the basilar carotids and the arteries of the Sylvian fissure, were sclerosed and their walls in some places calcified.

On microscopic examination the subadventitial spaces were found to be widened and to contain fatty granules, pigment, and blood corpuscles; the walls of the vessels were thickened, sometimes so much so that the lumen had entirely disappeared. In some places there were miliary aneurisms, and atheromatous and fatty degeneration around the vessels—there was plastic exudation in many places. But the most notable changes were in the nerve cells of the cortex; the layers of this tissue were not well marked, and in many places no normal looking cells could be found. In some places there was an accumulation of numerous brown pigment granules, in other places small, round, fatty particles. Many of the cells seem to be altered in shape, and the nuclei pale and indistinct; in some places the cells seemed to be broken down into formless clumps. The nerve fibres of the cortex as well as the processes of the nerve cells took part in the general degeneration. These pathological alterations were most marked in the frontal and central convolutions, and here also the vessels were most affected.

On the Sequelæ of Ergotism.

Dr. Franz Tuczek, whose interesting descriptions of insanity following ergotism were in part reproduced in our Retrospect of October, 1883, p. 426, returns to the subject in the "Archiv" (xviii. Band, 2 Heft). Since the epidemic of *ergotismus spasmodicus* in Hesse seven years have now elapsed. Anxious to know the durable results of the intoxication following the mixture of ergot in the rye bread eaten by those affected, Dr. Tuczek has tried to keep his former patients in sight. With admirable definition, as well as brevity, he gives a sketch of 29 cases, ending with the following remarks: "Of the 29 patients treated for ergotism in this asylum (Marburg) nine are now dead. Of four of these the results of a post-mortem examination have been already published, though we shall now add a few observations. The others sank and died, sooner or later after their discharge, suffering from convulsions, and being much deranged in mind.

"Of the 20 survivors," goes on Dr. Tuczek, "I did not meet any in my visit to Frankenberg on the 16th of May, 1886. Four of them seemed to have remained free from all appearance of the disease; but the condition of one is doubtful. I was able to examine the other fifteen cases and note their condition. Relapses of convul-

sions were frequent. Two patients still suffer from epilepsy; most of them have still defects of the intelligence, are under the mental average of the normal population; only three are quite sane in mind, and these three are the only ones in which the knee clonus returned. In one case it came back in one knee, in the other two it returned in both; in all the other patients the knee clonus entirely failed. There were no remaining disorders of sensibility, reaction of the pupil, or ataxia. More than half the patients still suffer from headache; one has twitchings, giddiness, and weariness; another has giddiness, and a third tingling, girdle feeling, and twitching; a third twitching in the arms and legs." The author observes that although the symptoms of the working of the poison have thus persevered for seven years, they show no progressive character. Though the knee jerk has never returned there is no tabes, but the the patients are of diminished intelligence. In the four cases who died in the asylum lesions were found in the posterior column as previously indicated. Since then Dr. Tuczek has had time to study his prepared sections of the cord. In the grey matter he found the usual proportion of nerve fibres, save in one case where the symptoms were worse. In this spinal cord the nerve fibres were found deficient through the whole extent of Clarke's columns. The alteration in this tract was noticeable even to the naked eye, in the prepared sections, as bright points. The posterior intra medullary root handle which enters the posterior horn and radiates into Clarke's columns had also disappeared.

Dr. Tuczek observes that the symptoms of insanity from ergotism have a close resemblance to insanity from epilepsy. The character of the fits was the same, grand mal, petit mal, intervals of rest, pre- and post-epileptic delirium, benefit from bromides: all here as there. He cannot say how many were the sufferers in this epidemic; but whole families died out. Many persons still have epilepsy, and in every one of the infected villages there is a number of people who have a permanent loss of intelligence.

Pellagrous Insanity.

The parallel between the insanity following the use of diseased rye and that following the use of diseased maize naturally attracted Dr. Tuczek's attention. He found that though the Italian literature of pellagra was abundant there was a deficiency in pathological examinations. Wishing to judge for himself, he travelled to northern Italy in order to study pellagra. Some account of his observations is given in the "Centralblatt für Nervenheilkunde" (No. 19, 1887), and in the "Allgemeine Zeitschrift" (xlv. Band, 3 Heft, p. 127). Dr. Tuczek saw 350 pellagrous patients, and was present at eight dissections, four of which he conducted himself. The symptoms of pellagra are erythema of the hands or other uncovered parts, with a feeling of burning in

the skin, globus feeling, pains in the neck, girdle pains, and partial anæsthesia. There is muscular weakness and sometimes spasms or cramps. The insanity is specially characterized by melancholy, sometimes taking the form of melancholy with stupor, which finally passes into mental weakness somewhat like that accompanying *dementia paralytica*, but without a progressive character, and without any paralysis of the cranial nerves. Mania is seldom observed. Out of 300 cases examined by Tuczek the knee phenomenon was increased in two-thirds with other appearances of spastic spinal paralysis. In seven cases the knee phenomenon was wanting. In 23 cases the foot clonus was present.

In eight cases examined through the microscope he found degeneration of the spinal cord. In two cases this was confined to the posterior column. In the other cases there was combined disease of the posterior and postero-lateral columns which was symmetrical on both sides. The grey substance was found to be normal.

The anatomical examinations thus showed the analogy between pellagra and ergotism; but in the former the posterior columns, in the latter the posterior and postero-lateral columns are affected. On the nature of the toxic substance Tuczek gives no opinion. He quotes the observation of Neusser that pellagra is owing to a toxic substance contained in spoiled maize, and which is matured in the intestinal canal.

In the discussion which followed upon the reading of Dr. Tuczek's paper Dr. Leppmann quoted the observations of Venturè, who found in the blood of pellagrous patients a microbe like that stated to have been found in lepra.

Dr. Tuczek has undertaken the articles on Pellagra, Ergotismus, and Lathyrismus, in the Dictionary of Psychological Medicine, now in preparation, to be published by Messrs. Churchill.

Idiocy following the use of the Forceps.

Dr. P. D. Koch, of Copenhagen ("Neurologisches Centralblatt," No. 3, 1888), describes the following case:—The mother of F. K. was delivered with forceps owing to weakness in the pains which caused a wound in the head. The child lay three days in convulsions. From his eighth year he was seen by Professor Mendel. On the left parietal bone there was a cicatrix of three inches running from the middle of the coronal suture as far as the sagittal suture. At this cicatrix there was a deep depression. The right side of the face was thinner than the left; the right arm was paralyzed and bent upon the wrist and elbow. The right leg was paralyzed, and there was weakness on the left leg. The patient could move about on crutches, and speak a little, but indistinctly. He could not add two and two together. His intelligence remained very low up to the time of his death, which took place when he was thirty-three years old. He died after an epileptic fit. During

the whole of his life he was visited by such fits at irregular intervals. The examination was confined to the nervous centres. They found a healed fracture of the left parietal lobe about two centimetres long. The dura mater was normal, but the pia mater was thickened and adherent to the underlying brain. It also showed numerous granulations, especially in the middle line. The brain weighed about 1105 grammes. The left hemisphere was smaller than the right. In both hemispheres, but especially in the left, there were numerous small nodes of considerable toughness about the size of a cherry stone. These were confined to the grey matter of the brain. These nodes were analogous to the patches of multiple sclerosis described by Bourneville and Brickner; but in Bourneville's case the sclerosed parts were as large as hazel nuts, and consisted of a tough mass of neuroglia in which the nervous elements were entirely wanting. The outer layer of the cortex was found to be four times thicker than usual. The nuclei were found more abundant than in normal brains. The ganglion cells were rare, but remains of what appeared to be shrunken cells could be noticed. The nerve fibres were observed to be in some places degenerated. The vessels seemed normal. The medulla oblongata and spinal cord were found in a normal condition.

Loss and Recovery of Memory.

Dr. A. Pick ("Archiv," xvii. Band, 1 Heft) describes a patient who had been admitted into the hospital at Vienna for peritonitis following on delivery. She was transferred into the asylum at Dobrzan. She had some hallucinations, but the most noteworthy symptom in her mental state was a loss of memory of the events in her life. She had forgotten that she had been recently delivered, though she remembered something about an illegitimate child whom she had borne. She had forgotten her subsequent marriage. She could not remember the visits of the physician the day before, forgot that she had eaten, forgot where her bed was. At the same time she could understand what was said to her, and answer questions. Her memory of past events slowly returned. She began to grasp one event in her past life after another, and after three months she left the asylum recovered.

Aprosexia.

An emperor of Rome offered a reward for the man who should devise a new pleasure. It is more easy devising a new disease. Dr. Guye, of Amsterdam, has introduced one under the name of Aprosexia from the Greek προσέχειν, the incapacity of paying attention to a subject. ("Allgemaine Zeitschrift," xlv. Band, 3 Heft). As the result of several observations he finds that obstruction of the nasal passages through disease may cause much weariness of body and inaptitude of mind. He thinks that the chronic inflammation in the nasal passages impedes the passage of lymph from the brain. Dr. Guye thinks this

a cause of dulness in children, and that the attention of teachers should be directed to the state of the nasal passages and the character of the respiration. I have sometimes been struck by the emphatic manner in which patients suffering from chronic coryza have complained of the dulling and depressing effect the exacerbations had upon the mental faculties.

On Defects of Vision Dependent upon Disease of the Occipital Lobes.

Dr. Moor, of Dusseldorf, has found in the course of his practice some cases of visual defect which he believes to be dependent upon disease of the cortical centres ("Neurologisches Centralblatt," No. 8, 1888). These with Munk he places in the occipital lobes. He observes that when we get hemiopia with diminished reaction of the pupil you may infer a lesion on the nearer side of the corpora quadrigemina ; but homonymous hemiopia with integrity of reaction of the pupil indicates a lesion in the occiput. He indicates three layers lying under one another which have different functions, one the perception of colour, the second the sense of space (Raumsinn), and the third the sense of light (Gesichtsfeldausdehnung), and he thinks that these modes of perception may be affected in different degrees. He mentions some cases where there was *neuritis optica* in the stage of atrophy with contraction of the field of vision, which he treated with iodide of potassium and a seton in the neck. In another case there was weariness of vision without any alteration in the posterior chamber of the eye, accompanied by pain in the back of the head. In others there is great irritability to light without any alterations seen by the ophthalmoscope.

Disturbances of Vision of Cerebral Origin.

Dr. C. Reinhard has a long series of observations on the question of localization of the brain functions with special reference to disturbances of vision ("Archiv," xvii. Band, 3 Heft, and xviii. Band, 2 Heft). He has carefully studied sixteen cases—two of general paralysis, three of secondary dementia, four of senile dementia, and seven of partial dementia.

The following summary contains the principal conclusions to which his researches have led.

Disturbances of the motor functions were observed to follow the injuries to different parts of the cortex, but these followed with greater certainty the nearer they approached to the fissure of Rolando, while lesions of sensibility were especially manifested when the parietal lobes are affected.

Lesions of the occipital lobe cause direct disturbance partly by causing soul blindness and partly by causing cortical blindness.

Lesions of the parietal lobe may indirectly cause disturbances of vision.

The loss of knowledge of colours and the perception of space is to be

regarded as soul blindness ; so also is the loss of or injury to optical memory.

When the perception of light is lost, one has to do with cortical blindness. Partial soul-blindness is defined as a condition in which the recognition of single colours and the impression of distance is maintained and only a small part of remembered visual images is lost, but if we have a double-sided and incomplete defect of sight, this should be called partial blindness.

Both are dependent upon a lesion of the convexity of the occipital lobe. In soul-blindness the lesion is superficial; in cortical blindness it goes through the whole of the grey matter and even implicates the white matter beneath.

The extension of the optic nerve on the cortex is so arranged that every point of it corresponds with two identical points of the homonymous halves of the retina. He cannot succeed in localizing the two fields of vision that exist in the retina in two separate parts of the occipital lobe. He thinks that the hypothesis of Wilbrand that the centres for the perception of light, colour, and space, are in three layers of the cortex, gives the best explanation of the cerebral disturbances of vision. The objections of Goltz against the existence of cerebral disturbances of vision do not hold good in human subjects. Reinhard found visual defects following disease of the occipital lobes, or of the parts surrounding them, to cause enduring disturbances of vision.

Change of Personality in the Insane.

Dr. Conrad Alt ("Zeitschrift für Psychiatrie," xlv. Band, 1 Heft) treats of this species of delirium. Not only do patients in asylums often believe themselves to be somebody else, but occasionally they assign imaginary characters to those round about them generally having a relation to their own delusion. One of Dr. Alt's patients had a new name and history for every one who came near her. She recognized the physician as a relation. On one occasion he brought ten students with him and asked her if she knew them. She immediately said she recognized them all, and gave their names, occupation, and residence. The names were written down. After ten minutes they came back, but she still gave each the name she had previously bestowed upon him.

We have not space to reproduce Dr. Alt's cases, but in every asylum there are lunatics who believe themselves to be some distinguished person; some even hold that their sex has been changed. Dr. Alt found that two-thirds of the new cases, and one-third of the old cases, in the Julius Hospital of Würzburg had thus lost the idea of their own personality. Dr. Snell found that more than half of the new patients and about a third of the older ones showed this symptom. Dr. Alt's explanation of this delusion is that as children seize upon a word, letter by letter, and syllable by syllable, and the one syllable suggests the other, so in certain insanities, the suggestions

which rise in the mind are not corrected by a sound judgment, but lead at once to false beliefs. Seeing a resemblance, guessing, and receiving as true, quickly follow one another.

He observes that if the mind is to work correctly, the disposition or will should be subject to the understanding ; but sometimes the will rules over the understanding instead of being guided by it. This is specially characteristic of insanity, and constitutes the foundation of the so-called primary derangements. The next result of such a predominance of the will is a weakening of the power of apprehension. The patient has so much to do with his own personality, is so sunk in himself, that he does not give the necessary attention to the outer world. Some things he notices and remembers with morbid quickness ; others he passes by and forgets, hence his whole relation to the outer world becomes deranged.

If a maniac or melancholiac believes himself to be a different person, he has a wonderful change in his own thoughts and feelings to found upon. Sometimes the lunatic believes that he contains within him another person. He then looks upon his former ego as something different. Sometimes he talks of himself in the third person. He sees himself, as Goethe said he saw a figure of himself going beside him. Dr. Alt tells us that he has dreamt of himself as being divided into three persons. We wish he had given this singular observation more clearly ; indeed, Dr. Alt might have made much more of his experience in dreams. Many cases of insanity no doubt resemble dreaming, and on recovery patients seem to be coming out or awakening from a long dream. Slowly with the increase of mental power the course of the thoughts becomes always more collected and indistinct, phantasies become clearer, and then the mind recognizes the visionary forms for what they really are. There is a short struggle, and then consciousness resumes its true place.

A peculiar symptom of the altered impressions in insanity is shown in the habit some patients have of collecting stones, bits of glass and other trash, as valuable jewels. In one case, mentioned by Dr. Alt, a woman carried about a jar of seltzer water, which she held to be her child. She brought all kinds of things which she picked up, and showed them to the fancied child, and seemed to enjoy the pleasure which the child took in seeing them.

On the Simulation of Insanity.

In an article upon this subject ("Archiv," xix. Band, 3 Heft), Professor Fürstner describes an imposition, in which the only motive appeared to be the desire to excite religious wonder.

In the year 1879, Sabina S—, a girl of seventeen years of age, living in a village near Heidelberg, gave out that she had become blind and paralyzed so that she could not rise from her bed. She did not require any food, as her guardian angel, who appeared to her, gave her nourishment. She received visitors in a lighted room hung round

with pictures of the saints ; and not only the villagers, but priests and doctors became convinced of her miraculous agency. She had frequent tonic and clonic contractions of the face, especially the muscles of the eye and mouth. At other times the convulsions implicated the extremities, or she was seized with cramps so painful that she cried out for her guardian angel to help her. Bloody sweat appeared in her forehead, and on two occasions a nail was found run through her foot.

The priest was warned by a letter that she would be carried into the churchyard of the neighbouring village by her guardian angel. One night she was found there, her stockings and clothes quite dry and clean, although it was raining at the time. She was carried back to her bed. She knew many things that happened in the village, and even was able to inform the villagers, on the authority of the guardian angel, who of their deceased friends were in purgatory and who were in hell.

Dr. Fürstner, when called in to see her, soon made out that she was not blind, but thought that she had real hysterical fits. He proposed to take her to the hospital, to which she readily consented, only asking leave to take with her a paste-board trunk full of images of the saints. Here being closely watched a series of discoveries was made. A piece of black bread was found concealed about her person. She abstained from food for four days, and then offered money to the nurses if they would allow her to take food secretly. A false bottom was found in the trunk, which contained almonds and pieces of bread, and also a nail similar to the one which had run into her foot. In the end she confessed that the whole was a fraud, which she had been tempted to commit by reading the life of the prophetess, Catharina Emmerich.

In the village, not being closely watched, she used to get up and get food. She had walked to the churchyard carrying her clothes and stockings in a bundle above her head, and she put them on when she heard people coming, so that they were found to be dry. Dr. Fürstner observed that he would not have believed it possible that a girl of seventeen could have imitated so accurately the tonic and clonic convulsions which she had learned from witnessing them in a woman in the village. The whole deception showed an extraordinary amount of misdirected energy and determination.

On the Favourable Influence of Acute Diseases in Insanity.

Dr. George Lehmann ("Allgemeine Zeitschrift," xliii. Band, 3 Heft) has called attention to this curious subject. His citations of authors, who have given cases in which patients recovered from their insanity during the course of some intercurrent disease, fill above two pages. The specific diseases mentioned as having had an influence in this way are typhus, typhoid, intermittent fever, variola, morbilli,

scarlatina, relapsing fever, Asiatic cholera, acute rheumatism, pneumonia, and pleurisy.

Dr. Lehmann himself contributes two cases. A woman of thirty-five years old, after a miscarriage, fell ill of *melancholia agitata*, with delusions and illusions of the senses. After six months she seemed to have fallen into a secondary condition of mental weakness, which had lasted for a month, when she was seized with erysipelas of the face with fever, which lasted nine days, after which she became sane, and was dismissed in a month quite recovered.

Dr. Lehmann cites several other cases of recovery from various forms of insanity following upon erysipelas.

Unfortunately we do not know the conditions under which these unhoped-for recoveries take place. Though Dr. Lehmann has collected a large number of instances, we know that they form the exception, and, indeed, form a very small percentage of the cases in which general disorders of the body come and go without having any favourable influence upon the insanity. Nevertheless there may be cases in every large asylum in which, by exciting some transitory disease, we might cure the mental affection; and it is quite possible that, following out this consideration by a careful line of observation and experiment, a cure for some forms of insanity might be discovered.

The second case described by Dr. Lehmann was a woman of fifty, afflicted with melancholia and hallucinations, who recovered from her mental derangement during the course of profuse vomiting of blood from the stomach. He supports his case by quotations from several writers, who record recoveries from insanity after profuse loss of blood coming from menstruation or hæmorrhoids, and bleedings from the nose and other hæmorrhages.

History of Psychiatry.

Those interested in the history of the treatment of insanity will do well to consult two papers in the "Allgemeine Zeitschrift." The first (xliii. Band, 1 Heft) contains a learned paper on the "History of the Care of the Insane in Germany during the Middle Ages," by Dr. Kirchhoff, which is full of interesting matter.

The second (xliv. Band, 2 Heft), by Dr. H. Laehr, treats of the "History of Psychiatry" in the second half of the eighteenth century.

Dr. Laehr throws doubt on the dramatic story of Pinel's striking off the chains of forty-nine lunatics in the Bicêtre, on the 24th May, 1792. He observes that Pinel's influence has been exaggerated, and that the more humane treatment of the insane was due not so much to particular men as to the general improvement of the age in medicine and manners. The claims of Chiarugi in Italy, and of William Tuke in England, have also to be considered. Dr. Ritti, in the "Chronique des Annales Médico-Psychologiques," September,

1888, has criticized the remarks of his German colleague after an amusing fashion. He advises those who are in doubt about the claims of Pinel to read the work of Dr. Semelaigne, "Philippe Pinel et son Oeuvre," &c., Paris, 1888. Of this little book we can speak in favourable terms. We understand that Dr. Semelaigne's son, who recently visited England, is preparing an article on "Non-restraint."

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3. *Dutch Retrospect.*

By J. Pietersen, M.D.

Bÿdrage tot de leer der Epilepsiebehandeling. Dr. J. H. A. Niermeÿer.

In the "Nederlandsche Tÿdschrift voor Geneeskunde" for February, 1888, there is to be found an article under the above heading ("A Contribution to the Study of the Treatment of Epilepsy") which is worthy of some consideration, for it discusses a subject which has received but scant notice at the hands of medical men, viz., the influence of electricity on the epileptic state. The success achieved by Dr. Niermeÿer in the treatment of the cases he cites would be a sufficient inducement for attempting by the method he advocates, if not the permanent cure, at least the amelioration of the condition of such patients in private and hospital practice, and before the consequent psychical change had introduced a new element in to the affection; but it would also be opening up a new field of study if a careful trial could be given, and the results published, of the effect of Niermeÿer's process on a series of favourable epileptic cases resident in asylums, the affection in such being independent of organic brain lesion. The practical importance of the subject justifies a quotation of Niermeÿer's contribution *in extenso*:—

In most of the text-books on electrotherapeutics, and in almost all the special works on pathology and therapeutics, we find little that is encouraging communicated to us as to the electric treatment of epilepsy. The remark is almost universally to be encountered that the application of electricity to epilepsy has hitherto furnished but unfavourable results, and it is only in some of the most recent productions on electrotherapeutics that cases have been brought forward in which great improvement or actual cure has supervened. This can cause us but a small degree of surprise when we take into consideration the fact that the ideas current at the present moment as to the cerebral locale in which the epileptic symptoms originate differ in great measure from those which were prevalent but a short while ago. Where the medulla oblongata and pons were formerly regarded as the cerebral districts which played the greatest part in the origin of epileptic phenomena, the conviction at present is slowly gaining ground that in these states there always exists a pathological disturbance of the cortex cerebri. Were it necessary for the full explanation of all the clinical symptoms of the disease to include in our pathological view the more deeply-located centres, experiment and clinical investigation have more clearly brought to light the fact that the functionally-disturbed cortex is of great influence in

this affection, that in it, in fact, is to be found the area of exit of the epileptic phenomena. When present experience thus teaches us that this opinion, indeed, merits preference to that formerly universally accepted, it is not to be wondered at that the application of the electric current as formerly practised could not furnish any favourable results. For this application had for its especial object the subjection of the medulla oblongata and pons to the electric influence, while the real seat of lesion lay elsewhere. Erb was one of the first to draw attention to this, and expresses his surprise ("Handbuch der Elektrotherapie") that so few endeavours appear to have been made to treat epilepsy in the light of present pathology by means of electricity, and who first communicated cases treated thus by him. He assures us of having caused great relief in two instances from a combined treatment of cold douche, bromides, and electricity, and considers the last-mentioned an especially beneficial medicinal help in epilepsy. Haver Drœze (Psychiatrische Bladen, III.) further notifies a great improvement in a case of epilepsy in which the cortex cerebri had been brought under the influence of the constant current. Stein ("Lehrbuch der Allgemeinen Elektrisation," III. Aufl.) mentions an instance of cure by the influence of franklinisation (succussion produced by shocks from a Leyden jar). Later on, however, he experienced no further success by means of this method of treatment. Watteville (Elektrotherapie) speaks of many cases successfully treated thus by well-known men. He, however, does not adduce names in support of his statement, and gives no particulars as to the method of application, etc. Communications as to cure have also been somewhat scanty of late, and I therefore trust some benefit may accrue from the short report I wish to make of three cases which have been under my care during the last year, and in which the constant current, combined with a modified bromide treatment, has been employed. And here I intend to answer an objection which no doubt will be urged by some, whether the success of the treatment cannot rather be ascribed to the bromide medication than to the electrical reaction, seeing that it is generally recognized that bromide salts rank as the most potent remedy we know of in cases of epilepsy. After consideration of the following points it will, I trust, be sufficiently convincing that here, at all events, the chief credit must be given to the electrical reaction, and that we must regard the bromides as acting merely as an adjuvant remedy:—

1. Each patient had, previous to coming under my care, been placed under the influence of bromides, the first with very large doses, the third only with small daily quantities. In the second case mentioned below I could not obtain any information as to the actual quantity taken daily, but it was undoubtedly proved that she had been treated with this remedy for many years.

2. In the first and third cases *no improvement whatsoever* had resulted from this constant bromide treatment. In the second instance intermissions of circa a month in duration were obtained thereby; later on, however, even these had ceased.

3. The patients, while under my care, took doses amounting to about five grms. daily (*i.e.*, 77·2 grains). Anyone who has had much experience in the treatment of epilepsy will agree with me that this quantity is but very small, and employed by itself could have had but little effect. Binzwanger ("Epilepsie," in Eulenberg's "Real Encyclopædie der gesamenten Heilkunde," II. Auflag.) regards bromide-doses under five grms. per day "fur nahezu wirkungslos" (as almost ineffectual).

The electric portion of my method of treatment had for its aim:—

1. To bring the whole of the cerebrum under the influence of the constant current.

2. To employ, especially in the line of the gyri centrales, on one or on both sides, a stronger "stroomdosis" (Erb) ("dose of current") than has hitherto been used. The exact spots of location of the electrodes in each case will be found stated in the short report which follows. I only wish in this place to point out that—necessarily excluding cases of extreme hypersensitiveness—a

strength of current from four to eight mille-ampéres with an electrode superficies of 18 to 25 sq. c.m. can be employed without fear for the treatment of the gyri centrales. The rheostat (for introducing or withdrawing from the circuit a considerable amount of highly-resisting wire without stopping the current, and so being able to regulate or change the strength of the current at will) is employed, and we begin with small doses. Working in this manner I was so fortunate as to bring the treatment to a definitely favourable conclusion in each case without causing the patients any unpleasant sensations. For the proper treatment of the whole cerebrum it suffices to supply three to six mille-ampéres with the above-mentioned electrode superficies. Up till quite recently medical electricians were seriously warned against the application of more than a very gentle strength of current in galvanization of the cerebral organs. C. W. Müller ("Zur Einleitung in die Elektrotherapie"), who in general makes use of very weak currents, advises us not to overstep a strength of current of $\frac{1}{30}$-$\frac{1}{24}$. [The following formula represents the "dose of current" D (density of current) $= \frac{I}{S} = \frac{\text{strength of current in mille-ampéres}}{\text{acting electrode-superficies in sq. centm.}}$] Lewandowski in like manner ("Elektrodiagnostik und Elektrotherapie") warns us, while E. Remak (in an article "Elektrotherapie," in Eulenberg's "Real Encyclopædie") gives $\frac{5}{50}$, and Erb ("Handbuch der Elektrotherapie," II. Aufl.) $\frac{1}{20}$-$\frac{5}{25}$ as our limits. I have during the last few years in the treatment of various cerebral affections employed a much higher "dose of current" ($\frac{2}{20}$-$\frac{8}{25}$), and have come to the conclusion that therewith a speedier and better termination can be arrived at than by the application of a strength of current such as is usually recommended. Over and above this for some considerable time past in the electrical treatment of the auditory organs, and thus in the immediate neighbourhood of the cerebrum, strong currents have been employed without any deleterious consequences ensuing. Whatever benefit may be derived from such exhortations to extreme care in galvanization of the cerebrum, one must not fall into the other extreme of showing too great an anxiety. It must always be our aim to bring the portion of brain on which we wish to experiment under the immediate influence of the current, and we must be on our guard against making this influence a doubtful one by the employment of too weak a strength of current.

The following is an abstract of the cases he brings forward :—

I. *Idiopathic Epilepsy.*—A normally-developed girl, slightly anæmic in appearance, æt. 17, brought under treatment June 1st, 1885. Since April, 1884, she had suffered with epilepsy, the cause of which was unknown. No recognizable hereditary predisposition. It was ascertained with certainty that she had never suffered with infantile eclampsia; other physical digressions of importance were in like manner conspicuous by their absence. Menstruation, beginning at 15, had continued regularly and normally since. Objective examination revealed nothing abnormal, with the exception of the slightly defined anæmia mentioned above. With respect to the epileptic seizures there remains only to relate that she experienced no perceptibly marked aura, that they were not of long duration, and appeared, with but few exceptions, in the morning shortly after getting out of bed. They slowly increased in number, so that in the April and May antecedent to the commencement of the treatment four attacks had taken place. The electrical treatment of the case was local as well as general. The latter, instituted with a view to the benefit of her anæmic state, consisted of a powerful faradic pencilling of a great portion of the skin superficies. The former (cerebral galvanization) had effect—(1) By an electrode (kathode) being held in patient's one hand, while the other (anode) was applied with a gentle to and fro movement to the forehead; (2) By a diagonal application of the current, one electrode being fixed high up in the neck, while the other was moved about the forehead, with an interchange of position of the electrodes after a few minutes; (3) By a fixed anode treatment

along the track of the gyri centrales on both sides. In addition, patient was constantly treated with Sodii Bromid., varying in quantity from three to five grms. daily (*i.e.*, about 45 to 75 grains a day). The treatment lasted from June, 1885, to April, 1886, with the exception of a cessation for two months. During the first three months one attack per month persisted, since which time, August, 1885, all epileptic attacks have ceased *in toto*.

II. *Epilepsy occurring after traumatic affection.*—A lady, æt. 25, single, first seen September 12th, 1885. Has suffered for eighteen years with epilepsy. After close and careful investigation into her family history it appeared that no nervous heredity of any importance could be discovered. When seven months old she had, according to report, a serious "brain-affection," marked by high fever and convulsions (? meningitis); later in life measles and scarlet fever. At the age of eight a severe fall on the occiput with consequent unconsciousness. Shortly after this the first epileptic seizures made their appearance, and have never since left her. The attacks were unequal in their severity, sometimes short and slight in intensity, at others of long duration and attended with violent convulsions. Some days before each attack there was always present a feeling of depression, which mostly deepened into a condition of unbearable anxiety, and which terminated in a rapidly progressive loss of power in the left extremities, accompanied by an involuntary movement of the left arm. (This involuntary movement ensued later in the case for a few times *without* the usual consequent seizure; it never at any time occurred in the lower extremity.) The patient would thereupon totally lose the power of voluntary movement of her left extremities, and the seizure would then ultimately set in. Patient was for years treated with Pot. Bromid. By this means, indeed, shorter or longer intervals between her attacks were obtained, but during the last few years, notwithstanding the continuance of the Bromides, a monthly recurrence had been established, and was now constant. Since August 9th, 1884, patient had herself kept a record of her seizures, of which the following is an abstract. For purposes of comparison the epileptic seizures subsequent to commencement of electric course are appended:—

1884.	Attack on Aug. 9th.	1885 (continued).	Attack on June 2nd.
	„ „ Aug. 10th.		„ „ July 1st.
	„ „ Sept 15th.		„ „ July 12th.
	„ „ Oct. 5th.		„ „ Aug. 11th.
	„ „ Dec. 7th.		„ „ Sept. 11th.
1885.	„ „ Jan. 12th.	*Commencement of electric treatment.*	
	„ „ Feb. 23rd.	1885.—Attack on Dec. 11th.	
	„ „ March 19th.	1886.—No attack.	
	„ „ April 1st.	1887.—Attack on July 12th.	

The treatment of this case consisted of a continued bromide medicament (five grams. daily), and of a cerebral galvanization exactly similar to that employed in the preceding case. Only in this instance it was decided to treat the gyri centrales of the right side alone with the fixed anode in conformity to the symptoms observed during the aura. The application of the current was employed for quite 10 months. In the thirteen months prior to the commencement of the course 14 seizures had taken place; in the 25 months subsequent thereto only two, the longest intermission being 19 months.

III. *Vertigo epileptica.*—A married lady, æt. 33, of healthy appearance and normal physical development, came for consultation on August 29th, 1887. Attacks of vertigo commenced about ten months ago, which were rapidly increasing in number, causing both patient and those around her much uneasiness. She had preserved good health until the age of 18, when she suffered for five weeks with an attack of typhoid, which, so far as she can call to mind, left no subsequent ill-effect on her. About six years ago she had a fall downstairs, with consequent cerebral concussion and an unconsciousness lasting, according to patient's account, for the long period of 17 days. From this, too,

she completely recovered, and during a period of quite five years no ailment of any kind appears to have affected her. At the end of this time she commenced to experience, without any known cause, moments of "mental paresis" (belemmering der denken) which rapidly increased in severity, and drifted after a while into constantly-increasing attacks of vertigo epileptica. Just prior to consultation her attacks averaged from three to four daily. In the intervals between her seizures she evinced no abnormal symptoms. Suddenly, in the midst of a feeling of extreme good health, she would be seized by these attacks. These consisted of three distinct periods, the aura, the stage of unconsciousness, and the slow return to her normal state, occupying in point of time from one to two minutes. The aura consisted of a feeling of mental confusion, involuntary purposeless actions, and the uttering of random words or names. At the same time she would forcibly grip the nearest bystander, and with the constantly-recurring cry of "There, I've got it again," would immediately lapse into her unconscious state, marked by slight clonic contractions of the left extremities. She was never at any time conscious of these muscular contractions, and herein lay the evidence that such a period of unconsciousness, though short, actually existed. Patient had asserted that she always retained her consciousness, and it was only after the circumstantial account given by her husband of her attacks that doubts were set at rest as to the actual occurrence of an extremely short but complete abolishment of consciousness. The third stage was marked by a rapid recovery of control of her mental faculties, but with an attendant sensation of psychical oppression remaining for some time after the cessation of the seizure, and causing her (especially during the later attacks, when they were of longer duration) frequently to burst into an uncontrollable fit of weeping. Of late this depression was beginning slowly but surely to persist during the intervals of her attacks. In this case the current was employed almost exclusively along the track of the gyri centrales on the right side. A short preliminary diagonal (neck, forehead) application was used. Thereupon one electrode was fixed high in the neck, while the other was applied over the right gyri centrales. After some minutes an interchange of position took place. Lastly, the electrode at first applied to the neck was given to patient to hold in her left hand, while the other was not shifted from its position, and then a powerful current was for some minutes applied in both directions. This patient was also treated with a five grm. daily quantity of Sod. Bromid. The success of this course of treatment was very gratifying. While the attacks before its commencement averaged three to four a day when bromides in small quantity were being tried, during the first two weeks they dropped to three per week, during the two succeeding weeks to two per week, and after that they altogether disappeared, whereby a period of nineteen days elapsed during which there was no seizure. The treatment lasted about seven weeks, after which circumstances compelled patient to leave Amsterdam and return to her home at Groningen. A communication received with regard to her condition, and dated December 4th, 1887, reports that she has been absolutely free from seizures up to that date, thus making her period of absolute freedom from attacks seven weeks.

Are the results of the treatment of these cases, then, so satisfactory that they warrant the trouble and sacrifice of time which a continual electric treatment of long duration demands? I do not for a moment hesitate to answer this affirmatively, for it concerns here, at all events, cases which previously had been treated without result by other methods. In cases where the causal treatment of epilepsy cannot be ignored, and where the opportunity offers of treating a case with any hope for improvement by simpler means, this method will not be had recourse to, and it would be as well to make trials, *e.g.*, with bromides, etc., before advocating an electric curative course. But when this goal cannot be reached, then the consideration that the extremely serious nature of the malady on which the most wretched consequences for the sufferer might ensue, and which but too frequently affects detrimentally his social position, must prompt

us most urgently to neglect no means whereby cure or improvement can be induced, and I trust most cordially that this short contribution may in some measure assist in working out this design, and that the employment of the constant current may hereafter come to be regarded as of value in the therapeutics of epilepsy.

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4. *Austrian Retrospect.*

By A. R. Urquhart, M.D.

Criminal Anthropology, being a digest of the writings of Professor Benedikt of Vienna.

At the last International Medical Congress held in London, Mr Gladstone made the memorable remark that "Doctors are the future leaders of nations." This saying, however, by no means applies to therapeutists, but to biologists. Modern biology has revealed fresh methods of knowledge, and given new directions to all sociological studies. The psychology of the future will be an applied science of cerebral anatomy and physiology. And so with criminal psychology, for it is the most natural course to start primarily in the study of the science of crime, and in the science of its prevention, from the criminal act itself, which is no other than a manifestation of the psychology of the criminal. And to study the innate qualities of the criminal, his education, the biographical details of his life—education in the widest sense)—that is the train of thought of the criminal anthropological school.

I. *No exact science should start from metaphysical premisses.*

Ancient law was grounded upon such philosophical ideas as free will, responsibility, and the notion of right and wrong; and it remains a sad ethical fact that the fear of eminencies, excellencies, and consequences (which I jestingly call enzophobie) should cause a neglect of the principles laid down a century ago by Kant, in that work of mental deliverance, the "Criticism of Pure Reason."

Nowadays no student of nature starts in the study of the laws of nature from the metaphysics of force and matter. He rather observes the laws of phenomena. If he takes any interest in metaphysical questions he devotes his attention to them, apart from the material constitution of his branch of knowledge. For instance, a Tyrolese sharpshooter never neglects to aim his gun, however strict his religious notions may be. It is true that Providence may give his bullet any direction whatever, but the true believer is quite aware that Providence submits to the laws of projectiles. If, therefore, it is our experience that the highest principle of liberty in the whole cosmos lays aside all arbitrariness in favour of existing laws, we can surely study the laws of psychological phenomena without prejudice, and without being

continually tossed hither and thither on the giddy sea of the metaphysics of psychic forces.

Those who are materialistically inclined must, however, be asked to consider that psychical processes are performed in molecular processes within the brain, and that it must be admitted that there is a possibility and a probability that the resolutions and acts of men may have in each case another issue than they intended. If, therefore, they cannot compute and predict with certainty the vacillations of the ideas and sensations that lead to a resolution, it may be indifferent to them if in doing so there is any question of liberty or restraint—or of an equilibrium, which we believe to exist, but which is not to be computed by us, an equilibrium of opposing processes with a predestined issue.

II. *The second important principle in exact science is that of Nomenclature.*

It must consist of unprejudiced expressions. The science of law has not adopted this fundamental principle, inasmuch as it uses such expressions as "guilt," "punishment," "penalty," which involve distinct moral philosophical ideas. This is a chief cause of confusion in judicial proceedings ; and by correcting this error, the doctrines of modern science can be incorporated with law without difficulty, and without violent transformation. When the honoured president of the Supreme Court of Hungary read my book "On the Brains of Criminals,"* he said, no doubt in jest : "Lawyers will have to burn their old libraries now ! " It may be that an enthusiast, here and there, will take this remark in all seriousness ; but we may say that the development of mankind in general will not be rendered futile by a new idea, and that the contribution of a generation or a school is but a small brick in the historic building.

The results of the positive evolutional or criminal anthropological school will be an important and a new instrument for the guidance of jurisprudence ; but the doctrines of this school no more represent law than the compass meant the science of navigation. They are already ripe, and may be universally accepted.

It is a universal experience in the history of science that the artificial precedes the natural system. This has been the case in the science of crime.

It was not primarily the intention of the reform and transformation of jurisprudence that led the chiefs of the criminal psychological school to study the subject. It was rather the psychological interest of the question. The great poets especially studied all kinds of crime, and endeavoured to analyze them psychologically in their legal aspect. But this could only be done in the case of problems for which the material

* "Studien an Verbrechergehirnen."

of normal psychology was sufficient. Jurists, however, have constructed for themselves an artificial psychological ideal, which has no relation to the real psychology of the great majority of criminals. It is as if we sought to measure the actions, thoughts, and feelings of a Tasmanian by a European standard.

The psychologists entered upon the scene, and pointed out a large number of cases of pathological disturbance and pathological organization. They were, however, only too often seduced to explain as pathological what was peculiar and defective in organization. This is just where success has now been achieved. The interpolation of the second group between the first and the third permits us to find our bearings in all the facts of criminal psychology.

I have divided the criminal classes into four groups :—

1. Criminals of normal psychological organization.
2. Criminals by diathesis—neurasthenic.
3. Criminals who are mentally diseased.
4. Criminals of degenerated type.

Group 1.—Criminal acts, active and passive, are often committed by normally constituted individuals by reason of defective education, temptation, passion, apathy, etc.

Group 3.—The facts and investigations of large numbers of crimes have proved that many were committed during a pathological condition, protracted or transient, by those suffering from epilepsy, hallucinations, or congenital imbecility. These latter are recognized with difficulty by laymen, who are less instructed than they should be, and because it is only after continued systematic observations in confinement, very frequently only on necropsy, that conditions are revealed which had previously escaped the eye of the expert. Even in clear cases of this category justice has been at a loss, and its measures have failed to protect society—although that is its chief practical end. The mentally diseased have been at most relegated to a hospital from whence they have been often soon dismissed. The justice of the future will actively protect society by considering the probability of such individuals again committing similar crimes from the same cause, and will keep them under legal observation with the assistance of specialists. This has been adopted in Belgium, and the Belgian Inspectors General of Prisons have now under continued supervision all those that have been found not guilty on the score of manifest insanity. It is a well-known fact that there is in prisons a great number of mentally diseased and epileptic prisoners, whose condition was not recognized at their trial, nor even during their detention by doctors of no psychiatric training.

Group 4.—Degenerated individuals by their diathesis are so constituted that the deep, innate lacunæ in intellect, sensation, and psychic impulses and retardations cause them to have no power of resistance against crimes as soon as they are placed in circumstances which may lead to such acts. These form the category of great

criminals; they can be diagnosed during life by the shape of the defective cerebral organization, by the abnormalities of the skull. Their biography, their acts show that we cannot speak of their "responsibility" in the sense hitherto attached to that word. They do not possess that abundance of noble impulses and retarding concepts that protect the normal individual, although we must not say that they are entirely devoid of retarding concepts—such as the police and the executioner. They experience an inward struggle which does not lead to a moral victory, but they plan their acts and seek to escape the consequences, albeit with enfeebled strength of mind. Born criminals of this class are always occasional criminals, and *vice versâ*. Given circumstances lead them to each particular criminal act. These cases present the greatest difficulty to present legislation. The psychologist knows that he has to deal with an "irresponsible" individual, and the judge knows that his functions would be paralyzed by the acquittal of such persons. They are a most dangerous class, and the certainty of their dangerousness increases with the signs of their degeneration. The principle of free will in many cases compels punishment against the feeling of present-day legislation or acquittal in opposition to the common sense of mankind in reference to the setting free of such persons.

Group 2.—The most prominent psychological element of this group is *neurasthenia*, physical, moral, or intellectual, or a combination of these forms. It is either congenital or acquired in infancy, and is not so much absolute weakness as premature exhaustion combined with a painful sensation of weakness.

If a child soon grows tired of the muscular movements which ought to give it pleasure, and from which are developed the first elements of pleasure in labour, and if it suffers from a sensation of discomfort there soon arises a *physical neurasthenia*, an avoidance of labour, a resistance to work.

Similarly, the child learns what is displeasing to parents and teachers, and soon by experience recognizes the disagreeable consequences. Hence are developed retarding concepts. But if an individual possesses from childhood no strength to resist momentary excitations, nor to follow better impulses when the struggle within produces a feeling of intense disgust, he becomes a victim to *moral neurasthenia*. It develops into a habit of avoidance of moral labour, and in time he escapes the combat; his philosophy is to escape. Morals do not exist in the individual *à priori*. Moral sentiments and ideas are the product of the development of the human species. In the individual they are the product of the individual experience. The neurasthenic individual suffers from moral impotence, not from moral dementia—from feebleness of resistance and impulse, not from want of resistance and imperious impulse.

To enjoy the beauties of Nature and of Art labour is necessary. This fatigue is avoided by the individual who labours under *æsthetic*

neurasthenia. The desire of enjoyment may even be violent, but finds vent in the gambling hell, and such places. There is also a certain activity demanded by the legitimate joys of love. Love has to be gained and preserved. Therefore it is only the most frivolous that attract the neurasthenic. Disreputable houses are not so much the breeding beds of crime as the natural homes of the criminal.

Intellectual neurasthenia is secondary in importance, and need not be described at length.

The fundamental element of *Vagabondage* is physical neurasthenia, and when a lively craving for enjoyment is added to the avoidance of labour, the thief, the forger, the brigand, and so on, are formed. Here we meet with a social factor. The wealthy neurasthenic will be a useless, frivolous, noxious element of society, but will not come into collision with the law. If he is rich he will not be a vagabond ; nor, without complications, will the vagabond commit a crime.

Neurasthenia may be more or less habitual, or may appear in an epileptoid manner (to speak with Trousseau), that is to say, under a passing form, appearing from time to time with a regularity more or less accentuated.

This group comprises professional criminals, that is to say, those whose existence is professionally founded on criminal acts. But they are not to be regarded as insane. Their endeavours are perfectly reasonable, even just. They wish to gain a livelihood and to enjoy life. They are distinguished from men of normal organization by being unable to attain those objects by active labour, and by using means which are prohibited by the natural laws of society. They recognize the necessity of these social institutious by adopting analogous arrangements in their own associations. At times they are capable of heroism, morality, and generosity. They are not pathological individuals, but are distinguished from normal man by their different diathesis ("art des seins"). There are, of course, among them cases which link them with the insane and the degenerated.

There are two psychological elements to be added in the case of criminals who commit crimes of violence. These are a want of compassion and a callousness to the sensation of pain, and a diminished vulnerability. These are sources of cruelty, for the individuals so constituted are deprived of the virtue of compassion. They consider themselves privileged, and despise and torment others.

The element of superior physical force, uncompensated by the consciousness of other qualities, is also worthy of mention, for, as every man desires to make the most of his superiority, he resists with difficulty the desire to abuse it. When these cases of moral neurasthenia, incapable of resisting strong desires, occur, the brigand comes completely formed from the hand of Nature, as Athene from the head of Jove, as the type of the conquering barbarian.

One more psychological phenomenon remains to be described. I have called it the tickling of virtuosity (virtuositäts-kitzel). It is

the joy of acquired dexterity and capability which lead to the attainment of criminal aims. A side-branch of this is the conspiracy mania, plotting which may be epidemic or endemic, or even continue to flourish after the cause for the plotting has disappeared.

(To be continued.)

PART IV.—NOTES AND NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The Quarterly Meeting of the Medico-Psychological Association was held at Bethlem Hospital on Thursday, June 6th, 1889. Dr. Savage in the Chair. Among those present were Drs. H. Hayes Newington, E. B. Whitcombe, Charles T. Street, T. Outterson Wood, Fletcher Beach, D. Hack Tuke, Richard Greene, A. MacLean, P. W. MacDonald, David Bower, James Adam, J. Murray Lindsay, F. Wyatt Thurnam, Henry J. Hind, J. Beveridge Spence, E. W. White, S. Rees Philipps, E. Cuthbert King, David Nicolson, Edwin Swain, P. E. Campbell, Thomas Lyle, Geo. H. Savage, W. M. Harmer.

Letters were read on the question of pensions from Dr. Clouston, Dr. Urquhart (enclosing copy of Scotch memorial), Dr. Greene, and Dr. Campbell.

It was proposed by Dr. TUKE, and seconded by Dr. SAVAGE, and carried unanimously, that Dr. Kovelevsky, Professor of Psychiatry and Neurology, Karkoff, Russia, should be a Corresponding Member of the Association.

The following gentlemen were elected Ordinary Members:—Ed. Hobhouse, M.B. and B.S., Oxon.; Samuel Simpson, M.B. and M.C.H., Dublin, Assistant Medical Officer, Peckham House, Peckham; Edwin Goodall, M.D., M.S., Lond., Guy's Hospital; Dr. Peacock, L.R.C.P. and L.M., Edin., M.R.C.S. and L.S.A., Lond., Resident Medical Officer and Proprietor, Ashwood House, Kingswinford, Dudley, Staffordshire.

The CHAIRMAN then called upon Dr. Murray Lindsay to open the discussion on the question of superannuation.

Dr. MURRAY LINDSAY said this question of superannuation was a long and weary one, but to them all-important and vital. They had, no doubt, all foreseen the difficulties and danger surrounding this matter, which certainly had not lessened, but had decidedly increased of late, till they had now reached a very critical stage. They had not been rendered less or been improved by the new *régime* just commenced. The whole tendency of legislation and of officialism in recent years had been to ignore the best interests of the insane, to disregard the interests of the asylum officials, to ignore to a certain extent the medical element, and to increase the clerical and administrative work of the medical officers. Proof of this was found in what was passing in Parliament and in the County Councils. The recent appointment of Lunacy Commissioners was only another indication of the treatment meted out by officialism to men in their department, some of whom were well fitted for and thoroughly worthy of such promotion, but who had received a decided slap in the face and on whom an unmerited slur had been cast, for surely it could not in fairness to their claims be contended that there were no fit men in their own specialty to adorn such a post. (Applause.) Again, he had yet to learn any special fitness on the part of barristers of ten years' standing for the post of Commissioners in Lunacy. (Hear, Hear.)

A Bill had been brought into Parliament by Mr. Norris, entitled the County Councils Superannuation of Officers' Bill. That Bill should, he thought, be opposed, or, at all events, not allowed to pass unless some very clear definition was laid down therein safeguarding the interests of asylum officers. It was a dangerous and a compulsory Bill. Mr. Norris said that it would in no way affect them, but other able lawyers said that it would, if allowed to pass in its present shape. Section 4 provided a superannuation fund to be provided out of deductions of 2½ per cent. from salaries and wages. It took no account of allowances from asylum officers—a very important item. Then, again, the age named, 65, was far too high. There were not very many in full vigour at 65 who had been for 30 years in asylums. He thought they should try and get the age reduced to 50, or, at any rate, if a compromise had to be made they should not go beyond 55 (hear, hear); 65 was undoubtedly too high. The Royal Commission of last year recommended 60 as the age for voluntary retirement of civil servants, and 65 for compulsory, but this was 65 for voluntary retirement of servants of the County Council. By another section the powers conferred by the Lunacy Act upon the visiting Justices were passed on to the County Councils. He for one had not the same faith in the liberal administration by County Councils that he would be disposed to have in the visiting Justices, and what had transpired had been quite sufficient to satisfy them that in all probability their powers would not be exercised so liberally on behalf of asylum officials. The 13th section of Mr. Norris' Bill was very important, providing as it did that the superannuation could only be obtained if the fund was solvent. He was extremely dubious of the solvency of a fund formed from a 2½ per cent. deduction, and would be very sorry to find asylum pensions depending upon it. It would be a very broken reed to trust to. He was very glad to see present Dr. Hayes Newington, who had taken a very deep interest in this question, and had studied it most carefully. He would also, as a member of a County Council, be able to give them some idea of the views of County Councils, for his own part of the county at all events.

Dr. NEWINGTON said the question of the pensions of county officials was raised at the last meeting of his County Council, and a broad resolution was proposed that henceforth every servant should sign a paper on engagement acknowledging that he expected no pension whatsoever to be allowed him at the expiration of his service. He (Dr. Newington) strongly opposed that, and it was knocked on the head for the time. One objection raised was that the Council could not bind its successors, because they would have successors in three years' time, and it was also said that the Committee who had the power of arranging these pensions would have sufficient common sense to deal with the matter for themselves. He did not believe that the County Councils were going to upset everything, and that if they only talked about these questions sufficiently they would gradually get the better of their opponents. After the last meeting he spoke to a well-known man, who said, "I object entirely to pensions. Let us pay the men well to begin with, and let them provide for themselves." He (Dr. Newington) pointed out that that would be most unjust to the present ratepayers, who had already to pay considerable pensions (in fact, the pensions in their part of Sussex came to between £2,000 and £3,000), and would also have to pay increased salaries to medical officers and other servants of the County Council in order to allow them to provide for themselves. They would, therefore, have a double burden till the old pensions had lapsed. The question actually resolved itself into this: should they pay so much more or should they deduct so much from the salaries of the various officers? and there seemed to be the general feeling that that would be the fairest way of doing things. Of course what they wanted was something absolutely certain. It would not do to leave matters to the discretion of a County Council not yet elected, because however well disposed the present County Council might be in the case of any asylum officer, yet in three years' time a new set of men might

be appointed who would have no sympathy with him. The feeling seemed to be that there should be a certain amount deducted from the salary, and that had been the scheme of Mr. Norris's Bill. It was evidently founded on the scheme of the London and North Western Railway Company, which deducted 2½ per cent. compulsorily from the salary of every one of their officials, and put to it another 2½ per cent. of their own as a contribution in lieu of pensions. At first every officer had the option of joining, but now it was compulsory. They did not take anyone over the age of 25, and they kept them till 65, so that it required 40 years' contributions from each man of five per cent., in addition to the five per cent. added, to make a provision by way of pension. How would that apply to asylums? To begin with, 15 years as a minimum was only contemplated by Act of Parliament; the 40 years required by Mr. Norris' Bill would be entirely out of the question. Mr. Norris' Bill provided that 2½ per cent. *of their own money* should be taken by the County Council, who would not give one penny towards it, so that all they would get was what could be got out of their 2½ per cent. For instance, if a man retired at 65 he had an expectation of life of about 10½ years. Supposing he had been serving 30 years at a salary of £100, his contributions to the fund would have been £75, which at the end of that term would be worth at compound interest about £145, and that was the value of the money he had put away into the County Council treasury for superannuation purposes. But a man having served 30 years would be entitled by the Bill to a pension of £50 a year for his expectancy of life, and that would mean £550. He had only contributed £145, and there was no provision whatsoever outside the Bill for any money being added by the County Council. Therefore the Bill was inoperative; it could not possibly work. Section 13 showed how Mr. Norris proposed to get over the difficulty by providing that the County Council might from time to time revise the scale so as to make the fund solvent. That meant that although the scheme promised £550, yet when they came to look into the matter and found that the pensioner had only contributed £145, then, instead of getting £50 a year, he would be cut down to something like £15. A principal question was whether asylum officials came under the operation of this Bill. It seemed to say: "Every servant of the County Council *except those for whom provision shall have otherwise been made by Act of Parliament.*" Could they say that under the Lunacy Act they were provided for? ("No.") Certainly not. That referred to the police, who *were* provided for because they had statutory pensions. He thought they would have to look at this point, for he believed that they would undoubtedly come under the operations of this or any similar Act. On the 19th May the Attorney General was asked in Parliament whether the asylum officers did come under the Local Government Act. He said he had very little doubt on the point, but the question was going to be settled. He (Dr. Newington) did not see what doubt there could be. The County Council appointed the officers, and had the entire charge and provision of the management and every detail connected with county asylums. He did not see how asylum officers could be anything else but *employés* of the County Council, and would, therefore, come under such a Bill as this. The Bill must be fought, but it did not follow that the germ of the Bill should be fought. He thought it would be acceptable to everybody that this principle should be adopted, that each person should contribute to his own pension, but that his employers should also contribute. This Bill was iniquitous, in so far as it only took the man's own money and put it by for him, and if he wished to leave the service and go into anything else he would not get it; but it would be entirely different if the County Council put a large sum side by side as the North Western had done. Even the North Western Fund, large as it was, was being wound up presumably because it would not work. He thought the germ of the Bill was worth maintaining, *i.e.*, that each person should contribute so much from his salary, but it must be accompanied by a contribution from the county rates.

Dr. MURRAY LINDSAY said the great blot in the Bill was the omission of any distinction between the officers appointed before the passing of the Local Government Act and those who might be appointed since. All that Dr. Newington had said might be very applicable to officers who might in future be appointed, but it was entirely inapplicable to those previously appointed. No scheme could be fair that did not distinctly recognize the two classes of officers.

Dr. GREENE, in response to a call from the Chairman, said the question was not what they might want, but what they could get. He thought they would have to be satisfied with some modification of the Civil Service scheme; that was if they were to have a pension that they could look to with absolute certainty.

The CHAIRMAN said there seemed to be a pretty unanimous feeling about what was wanted, but he supposed the method of obtaining it was the great difficulty. The letters he read pointed in the same direction, that committees had met and they had agreed to certain things; they had met again, and had modified those until at the end of a fourth committee meeting nothing was left. Dr. Urquhart, in pressing that some definite suggestion should be pressed upon the Government, had enclosed a list of suggestions, and it would seem desirable that some proposition should be agreed to which would represent the feeling of the meeting, and as such might be laid before the Government.

Dr. SPENCER said as far as he was himself concerned he should prefer the matter to be left as it was. He had not the smallest doubt that public men at present were dead against pensions, and if the thing was brought forward the pension question would be wiped out altogether. The London County Council, for example, had put the proviso in all their advertisements that no one in the future was to have a pension, and he was sure that if the question was made a prominent one the result would be that their chance of a pension would be completely wiped out.

Dr. SAVAGE said if it was possible he should prefer to leave the question in the hands of the Committees, and not to go to the County Councils.

Dr. MACDONALD said the County Council for Wiltshire had discussed the following resolution: "That all engagements made or to be made between the Council and officials shall continue, and be upon the understanding that no pension or other sum of money shall be paid by the Council after the termination of the service." That resolution would include all existing officers, because it said "all engagements made," as well as those to be made in the future. Were the County Councils justified in proposing such resolutions considering the present Acts of Parliament? Asylum officers were to a certain extent provided for, but not as a certainty, and no Committee of an asylum could grant a pension without referring to the County Council. The resolution was rejected by the Wiltshire Council, the opinion being strongly expressed by one speaker that he had very little fear that the Council would be extravagant with regard to pensions, but that each particular case would be dealt with on its merits. The Council for Dorset had discussed a similar resolution, applying, however, only to future appointments, and how it would end he could not tell. He had discussed the subject with the Chairman and Vice-Chairman, and though their views differed from his own, he thought they were ready to take a fair and generous view. He could not agree that they should keep their mouths shut in this matter, for if they did they would come badly out of it. The general feeling on the part of the public seemed to be that doing away with pensions would be a saving. The Dorset Asylum had been opened 57 years, and during that time the whole sum paid in lieu of pensions did not exceed £1,200. If pensions were abolished, and, say, 10 per cent. added to their salaries instead thereof, the average annual wage of the asylum being about £1,800, that would be £180 more, which for 57 years would amount to the large sum of £10,260, as against £1,200 paid under the pension system. He believed that if the pension system was done away with it would create a great

many changes in the asylum staff, which did not now occur, because many now stayed on at low wages in the belief that they would ultimately be pensioned. He was afraid that much good would not result unless asylum officers were unanimous in the matter, but if they came forward as one united body he did not see how Parliament could resist them.

Dr. WHITCOMBE said unless there was some agreement as to what they wanted there was not likely to be much unanimity. For his own part, he thought that if superintendents were liberally paid so that they could make a provision for their families that would be the best way out of the matter. If deductions were made from their salaries as had been proposed, they might die before they became entitled to pensions, and then their families would lose the whole of the money so contributed. He was sorry that no plan had been formulated by the Committee appointed to consider the matter. At present the Association had practically nothing before it upon which it could act.

Dr. NEWINGTON said that the Committee had attempted to get a clause concerning pensions put into the Local Government Act, but this attempt failed. Since then there had been no pressing necessity for doing anything until Mr. Norris's Bill was brought before the public, and what was now to be done was either to kill it or to modify it so that it should not do harm. With regard to Dr. Whitcombe's objection, the Bill provided for the money that each officer had laid up in the county treasury being refunded to his family in case of death before the end of the term. The same principle was carried out in the North Western Fund; they returned to every man who was discharged for anything but misconduct or dishonesty everything that he had paid into the treasury, and supposing he wanted to retire they paid him half. There was, therefore, a certain amount of fairness in the Bill; the interests of the contributors were looked after very well, but the injustice of it was that the *employés* were to find the money and not the employer. He did not think there was any fairer scheme than the Civil Service scheme, which had been embodied in the Bill, but the question which would have to be settled, and the burning point, was how much should each man contribute out of his salary, and how much was the County Council to put to it to make the scheme workable.

Dr. MURRAY LINDSAY then proposed the following resolution: "That the Parliamentary Committee be instructed by this meeting to express its dissent to Mr. Norris's Bill."

Dr. FLETCHER BEACH seconded the resolution, which was agreed to.

Dr. HACK TUKE asked if there was any probability of a private Bill of this kind being passed?

Dr. LINDSAY said he thought not, but still they must be prepared.

The CHAIRMAN—Is there any further proposition?

Dr. LINDSAY—There is the question whether the Civil Service superannuation scheme could be made applicable to asylum servants.

Dr. GREENE—I will propose: "That in the opinion of this meeting all officers and servants appointed and to be appointed to asylums should be placed under the Civil Service pension scheme, and that all officers and servants be allowed to retire at 50 instead of 60 if paid out of the maintenance fund; the other officers to rank at 60."

Dr. LINDSAY seconded the motion. Although he feared they would not get the 50, they ought to try to get it.

Dr. SAVAGE thought they were all satisfied with the pension that they got if they would give it them. (Laughter.) He believed the Civil Service scheme was only permissory; they could not get it compulsorily.

Dr. LINDSAY—But we will try.

Dr. NEWINGTON said there had been a cry that there was no plan ready. All they wanted was to have something ready, so that in case Mr. Norris's Bill came forward they might put forward a proposition in favour of asylum officers. At present there was nothing at all. He thought, however, it was somewhat

hasty to bind the prospects of the county asylum servants by any resolution at a meeting of that size. (Hear, hear.) It was a little dangerous to devise any scheme. He thought it should be left to the Parliamentary Committee.

Dr. LINDSAY said it would be a recommendation to the Parliamentary Committee as coming from that meeting. The Civil Service scheme had been threshed out time after time, and there was a very general feeling on the part of medical officers in its favour. It was very generally accepted as the next best thing they were likely to get, or had any chance of getting.

The resolution was agreed to.

It was arranged that the Pensions Committee should be summoned to meet at an early date, and also that a circular should be sent to each member of the Association, stating the steps that had been taken, and asking his opinion on the points referred to.

ON THE USE OF RESTRAINT IN THE CARE OF THE INSANE.

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—In introducing the discussion on Restraint at our last quarterly meeting in Edinburgh, I used these words, "Restraint when dictated by harshness, irritation, or mere convenience is utterly wrong, but restraint when part of a well-considered plan of treatment, may, in special cases, be perfectly wise and right." This proved to be the unanimous opinion of the meeting; but it does not satisfy my friend Dr. Robertson, who has strangely misread your report of the discussion, and has thought it necessary with mistaken zeal, though I am sure the best motives, to come forth as the uncompromising champion of non-restraint. He writes to the Journal to express his surprise and sorrow at the errors of his brethren, and avers, in direct opposition to their own words, that they "advocated a return to the use of measures of restraint, whose all but total abolition was the especial glory of Tuke at York and Conolly at Hanwell, and reflected honour on the land of their birth." Under the extraordinary impression that such is the aim and such the practice of his *confrères*, Dr. Robertson gives many details of his own asylum management in order to show us a more excellent way. These details prove, what no one doubts, that he is an able and efficient Superintendent, but with one exception they are quite irrelevant. The relevant information is that Dr. Robertson uses restraint in surgical cases, uses gloves in highly suicidal cases, and does not regard their use as a violation of the "non-restraint" treatment. Dr. Robertson thus agrees with those who deem restraint justifiable in certain exceptional cases. His own judicious practice is a sufficient reply to his letter, and it is unnecessary to repeat the arguments used at Edinburgh.

Since Dr. Robertson so misunderstands his own position I can excuse his misapprehension of mine. To learn from his letter that I am "the leader in Scotland of a retrograde movement" and an "advocate of the cause of restraint," to be told that in my opinion "mechanical restraint is required in four classes of cases," and to have the foundation-stone of this asylum metaphorically hurled at my head, was indeed amazing.

My words at Edinburgh were :—"I am no advocate of mechanical restraint, and in ordinary cases regard it as unnecessary and wrong, because not the best thing for the patient. I think it needful only in very exceptional cases, but we can accept no dictation as to its use." Surely no words could be more explicit, or more strangely perverted. My practice agrees therewith. There is no camisole or instrument of mechanical restraint in Gartnavel, and its records show that, excluding gloves, I have used personal restraint in *two* cases during the last fifteen years, one of them being a surgical case, and in *two* cases have used a sort of protection-bed which I had to improvise for the occasion. The average number of patients resident during these years has been 512. With such a record perhaps I need not fear even the foundation-stone !

To give greater emphasis to his condemnation of restraint, Dr. Robertson refers to the bust of Dr. Conolly and quotes the speeches made at its presentation. Here are Dr. Conolly's views as given by his biographer, Sir James Clark (see Memoir, p. 160) :— "It is desirable, therefore, that it should be understood that there is no such thing as an absolute repudiation of restraint in the treatment of the insane. The warmest advocates of non-restraint admit that cases may occur in which it is proper to resort to mechanical restraint, and by this admission we do not think that we invalidate the principle, which is not of universal application, though it is made as nearly universal as possible, and is departed from only when the necessity for doing so is clear, and then with regret that there is no better way of attaining the object." Dr. Robertson's letter shows how a too zealous disciple may outrun a wise master.

Restraint used needlessly, or heedlessly, or harshly, cannot be too strongly condemned ; it was from *such* restraint that Conolly and his fellow-workers, to their eternal honour, delivered the insane ; but restraint used by a humane and skilful physician with full knowledge, and after full consideration, is in certain rare cases the kindest and the wisest treatment.

Yours faithfully,
D. YELLOWLEES.

Gartnavel, Glasgow, June, 1889.

Obituary.

WERNER NASSE.

Psychological Medicine has lost one of its most ardent and most intelligent workers in Professor Werner Nasse, of Bonn, who died on the 19th of January, in his 67th year, having been born in June, 1822. He was the son of Friedrick Nasse, the celebrated Professor of Clinical Medicine at the University of Bonn, who himself has likewise rendered great services towards the development of psychological medicine by endeavouring to study it as a branch of clinical medicine. To the father's influence on Werner Nasse's mental work we owe the latter's inaugural Dissertation (Bonn, 1845). *De singularum cerebri partium functionibus ex morborum perscrutatione indagatis.* In this excellent treatise Werner Nasse placed before himself the task of studying how far pathological changes in the brain of man throw light on the functions of the different portions of the brain. Soon after this he commenced to practise at Bonn, and at the same time he superintended a private asylum founded by himself. As, however, this work, though very successful, did not satisfy his aims, Nasse accepted in 1854 the directorship of the public asylum of Mecklenburg Schwerin at the Sachsenberg. In this position he earned not only the gratitude of the principality, and of its Grand Duke, who made him his physician in ordinary, but he acquired also great influence on the management of the insane throughout Germany. In order to exercise this influence in his own native country, the Rhenish Provinces of Prussia, he accepted in 1863 the Direction of the large and once famous asylum at Siegburg, near Bonn, which had fallen into a deplorable condition. He had to break with the past, and had to fight all the prejudices, the vested interests, and the abuses connected with this great establishment which had in the old days of Max. Jacobi been justly regarded as an ornament of the Rhenish Provinces. The hygienic arrangements of Siegburg were very bad, and they cost Werner Nasse the happiness of his life by depriving him in 1864, through typhoid fever, of his first wife, and about twelve years later of his second wife through puerperal fever. In spite of these misfortunes, and of multifarious opposition, partly due to the great claims on the treasury inseparable from the large reforms required, he continued the battle of his life and succeeded at last in establishing five great new asylums in the different provinces.

Nasse was supported by the sympathy and esteem of his professional brethren; he was, therefore, elected and constantly re-elected President of the Society for Psychological Medicine in the Rhenish Provinces, and also of the larger society of the whole of Germany. In addition to this he succeeded in establishing a great Society for combating the abuses of alcoholic stimulants which he regarded as a frequent cause of insanity, and as one of the banes of the Teutonic races; and he acted also as President of this Society. He was specially fit for these honorary duties by his noble character, his judicious and conciliatory manner, his highly cultivated mind, and his imposing personal presence. Great as these taxes on his strength were, he allowed another to be added in 1881 by the Professorship of Psychological Medicine at the University in Bonn, in connection with his duties as Director of the Provincial asylum at that place.

Nasse was one of the most conscientious workers, always the first at his post in the morning, and the last at night. He took a leading share in the work of all his junior colleagues and assistants.

Dr. Pelman, the author of a "Nekrolog," just published in the "Zeitschrift für Psychiatrie," Vol. xlvi., who himself had been in former years associated with Nasse as junior physician, says of him: "Never have I seen a more careful physician than he was, never a man whose manner at the bedside was more agreeable, and had a more calming influence on the patient." The work, however, was too much even for his gigantic frame. The writer of this short article,

who had been intimately acquainted with Nasse from early life, repeatedly endeavoured to make him see this, and to limit his duties, but in vain. When, at a visit last autumn, he had hoped to be more successful, it was too late; the heart and the blood-vessels had commenced to give way, and an apparently trifling traumatic lesion of one of the great toes led to a kind of senile gangrene.

Werner Nasse presented a remarkable instance of what some would call inheritance of talent from his highly gifted father and mother, the more so as his three brothers are all equally distinguished in other spheres of life, and as his three sisters *mutatis mutandis* were the same. In reality, however, inheritance in this family as in others played only a secondary part, compared with the careful early training and with the stimulus of example which one member of the family gave to the other.

H. W.

ALFRED EVERLEY TAYLOR, L.R.C.P., L.R.C.S.

It is with much regret that we record in our obituary the death of Mr. Alfred Everley Taylor, Senior Assistant Medical Officer of the County Asylum, Stafford, which occurred on March 30th, under circumstances peculiarly sad. His name must be added to the not inconsiderable list of asylum medical officers who have died in harness, and have been prematurely cut off as the direct result of disease or injury obtained in the discharge of their duty.

Mr. Taylor, who was the youngest son of the late Mr. William Taylor, of Scarborough, a well-known and highly esteemed member of the medical profession, had nearly completed his thirtieth year. He was educated at St. Mary's Hospital, qualified in 1883, and had been for the past four and a half years an Assistant Medical Officer at the County Asylum, Stafford. In the course of his brief career he shaped his conduct by an unflinching sense of duty, and never spared himself in the discharge of his work. Indeed, his thoroughness and devotion to work may be said to have cost him his life, the fatal illness being an attack of acute septicæmia resulting from pricking his finger slightly with the scalpel while making a post-mortem examination of the body of a patient who had died from acute laryngitis and pneumonia.

Mr. Taylor was of a literary turn and accomplished in his vocation, though he never contributed to medical literature. He was an ideal asylum physician, conscientious in his work, enthusiastic in his profession, skilled and thoughtful in the medical care of his patients, entering heart and soul into all the amusements and recreations, and playing regularly in the asylum band. His warm-hearted, genial, and thoroughly generous disposition had drawn round him a wide circle of friends, and his premature end has come as a shock to many who, like the writer, had seen him but a short time previously in the enjoyment of robust health. By his death a gifted and promising career has been cut short, and the Stafford Asylum has to mourn the loss of a valuable and highly conscientious medical officer.

JAMES MACLAREN, F.R.C.S.E.

It was with regretand surprise that the news of the death of Mr. James Maclaren was received by his numerous friends. He died at his residence at Larbert on the 25th of March last from pleurisy, after an illness of three days' duration. He died at the comparatively early age of 40, but, though so young

in years, his health had, for a considerable time previous to his death, been very delicate.

Dr. Maclaren was born at Ashby-de-la-Zouch in 1849, and was educated at the High School of Edinburgh, and afterwards at the University of Edinburgh. After qualifying as a medical practitioner he received the appointment of Resident Physician in the Royal Hospital for Sick Children, Edinburgh. In 1873 Dr. Clouston, who had just then been elected to the post of Physician Superintendent of the Royal Edinburgh Asylum, appointed Mr. Maclaren to the position of Junior Assistant Physician in that asylum. He and Dr. Clouston entered upon their respective duties on the same day.

Psychological research at Morningside was then rising to its zenith, having received a great impetus from the untiring energy and attainments of Dr. Clouston. The enthusiasm thus instilled into the work was catching, and Dr. Maclaren was not behind in contributing papers of much value clinically. It was just at this time that a new tide of reform was beginning to manifest itself in Scotch lunacy by the reconstruction and remodelling of asylums, and by more liberal and humane methods in the treatment of patients.

In Dr. Maclaren's case the many changes carried out at Morningside were not thrown away upon him or forgotten. When, in 1876, he was appointed to the post of Superintendent of the Stirling District Asylum, he found that the buildings were too small to accommodate the increased and increasing number of patients. With a boldness which afterwards redounded to his credit he removed all corridors and partitions within the buildings, which widened the wards from outer wall to outer wall. The effect of this change was such that all communication from the wards to the dining hall and the administrative part of the asylum was through the wards themselves.

The disadvantages arising from such an arrangement were soon lost sight of in the increased space and freedom afforded to the patients.

In 1882 he was called upon to assist in erecting an adjunct to the present asylum, to contain about 150 patients. This is a modern and most useful building, and combines comfort and economy in its construction.

In his own neighbourhood Dr. Maclaren was very well known and much esteemed. His services were much in demand in the way of presiding at public meetings and in giving addresses. He was a fluent, graceful, and cultured speaker. He was elected the first President of the Stirling Branch of the British Medical Association, which was formed this year.

He contributed many papers to the Medical Journals, chiefly on Chorea, Impulsive Insanity, Epilepsy and Insanity, Infantile Paralysis, and General Paralysis.

He leaves behind him a widow and two young daughters.

COMMISSIONER IN LUNACY.

In consequence of the resignation of Dr. Rhys Williams from failing health a vacancy occurred in May in the Lunacy Commission. We cannot allow the occasion to pass without tendering to Dr. Williams our sympathy in his enforced retirement from a post which he has filled in a manner so satisfactory both to the medical officers of asylums and to those having charge of single patients. His successor is Dr. Thomas Clifford Allbutt, F.R.S., M.A., LL.D., J.P. for West Riding of Yorkshire, Consulting Physician to the Leeds General Infirmary.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE ANNUAL MEETING.

The Forty-eighth Annual Meeting of the Association will be held on Thursday, July 25, 1889, at the Rooms of the London Medical Society, Chandos Street, Cavendish Square, W., under the Presidency of H. Hayes Newington, M.R.C.P.Ed.

Council meet at 10.30 a.m.
General Meeting at 11 a.m.
Afternoon Meeting (President's Address) at 2 p.m.

ASSOCIATION EXAMINATIONS.

July Examinations for the Certificate of Efficiency in Psychological Medicine, at Bethlem Hospital.

Examiners:

Dr. Blandford and Dr. Rayner.

I.—PASS EXAMINATION, THURSDAY, JULY 18, 1889.

Morning, 11 to 1.

Written Examination in Psychological Medicine. Questions will be asked on the Definition, Classification, Diagnosis, Prognosis, Pathology, and Treatment of Mental Disorders. Also on the main requirements of the Lunacy Law in regard to Medical Certificates and Single Patients.

Afternoon, 2 to 4.

Clinical Examination of Insane Patients. Candidates will be required to fill up Medical Certificates, and to write a short commentary on each case.

FRIDAY, JULY 19.

Morning, 11 to 1.

Vivâ Voce EXAMINATION.

II.—HONOURS EXAMINATION (Gaskell Prize).

The Examination will be held at Bethlem Hospital on the 20th and 22nd.

Candidates must pass the Examination for the Certificate, if they have not already done so; must have attained the age of 23, and must have been qualified medical officers in one or more asylums for at least two years.

Candidates will be examined in—1. Healthy and Morbid Histology of the Brain and Spinal Cord. 2. Clinical Cases with Commentaries. 3. Psychology, including the Senses, Intellect, Emotions, and Volition. 4. Written Examination, including Questions on the Diagnosis, Prognosis, Pathology, and Treatment of Mental Diseases, and their Medico-Legal Relations.

Order of Examination:

SATURDAY, JULY 20.

Morning, 11 to 1.

WRITTEN EXAMINATION (MENTAL DISORDERS).

Afternoon, 2 to 4.

CLINICAL CASES AND COMMENTARIES.

MONDAY, JULY 22.

Morning, 11 to 1.

WRITTEN EXAMINATION (PSYCHOLOGY).

Afternoon, 2 to 4.

MICROSCOPY.

Candidates intending to present themselves for Examination for the Certificate of Efficiency or for the Gaskell Prize should give (if possible) 14 days' notice to Dr. Savage, 3, Henrietta Street, Cavendish Square, W.

For particulars regarding the Examination for the Certificate in Ireland apply to Dr. Conolly Norman, Richmond Asylum, Dublin; and for particulars regarding that in Scotland apply to Dr. Urquhart, Murray Royal Asylum, Perth.

Appointments.

CAMERON, JAMES, M.B., to be A.M.O. to the Dundee Royal Asylum.

HAVELOCK, J. G., M.B., C.M., Junior A.M.O. to the Montrose Royal Lunatic Asylum.

HAYES, H. W. M'CAULLY, M.R.C.P., L.R.C.S.Edin., A.M.O. to Grove Hall Asylum, Bow, E.

ELKINS, FRANK ASHBY, M.B., C.M.Edin., to be Junior Assistant Physician to the Royal Edinburgh Asylum, Edinburgh.

MACPHERSON, JOHN, M.B.Edin., to be Medical Superintendent of the Stirling District Asylum, Larbert, N.B.

MILLER, A., M.B., B.Ch., to be Medical Superintendent to the Warwick County Asylum.

POPE, G. STEVENS, L.R.C.P., to be A.M.O. to the Dundee Royal Asylum.

ROSS, D. M., M.B.Edin., to be Junior A.M.O. to the County Asylum, Carlisle.

THORPE, A. E., L.R.C.P.Ed., to be Junior A.M.O. to the County Asylum, Stafford.

WARD, T. H., M.B.Edin., to be A.M.O. to the Exeter Asylum.

WIGLESWORTH, JOSEPH, M.D.Lond., to be Lecturer on Mental Diseases in University College, Liverpool.

THE JOURNAL OF MENTAL SCIENCE.

[*Published by Authority of the Medico-Psychological Association of Great Britain and Ireland.*]

No. 151. NEW SERIES, No. 115. OCTOBER, 1889. VOL. XXXV.

PART 1.—ORIGINAL ARTICLES.

Presidential Address delivered at the Annual Meeting of the Medico-Psychological Association, July 25, 1889, *by* H. HAYES NEWINGTON, M.R.C.P.Ed.

GENTLEMEN,—I have chosen as the subject of this address a question which, though it is almost as old as the present system of treating the insane, has been revivified with so much vigour as to demand at our hands the close attention which we should feel bound to give to it had it been entirely new. I am about to offer you some remarks on what is called "Hospital treatment for recent and curable cases of insanity." The reintroduction of this question is undoubtedly due to the necessity for the consideration of the great increase of the insane population; and it is appropriate in point of time; indeed, the time has been determined by the change in the composition of those bodies whose sanction and help are required for any new departure in this direction.

It is, perhaps, hardly necessary to remind you that to two members of our profession—Dr. Batty Tuke and Mr. Brudenell Carter—is due the credit of starting the discussion anew on this question, the former by an article, which appeared in the April number of the *Nineteenth Century Review*, entitled *Lunatics as patients and not as prisoners*, the latter by a speech made at a meeting of the London County Council, and both by their statements to the General Medical Council. The subject has been further reviewed by the *Times* newspaper in its issue of April 30th of this year. I feel sure that we are ready to convey our warm thanks to these gentlemen for making the best of their official opportunities of benefiting the interests of all concerned in the matter, whether they be ratepayers, patients, or doctors; and I am equally sure that I can promise on behalf of

every member of this Association the most cordial help and advice in working out any proposal that may be made for the purpose of lessening the terrible burden of insanity.

But, gentlemen, as your President, to some extent charged for the time being with the safeguarding the just claims and interests of this Association, I feel bound to bring to your notice, and to submit to your criticism, certain arguments and conclusions which, after making due allowance for the necessity of applying a liberal amount of *momentum* towards overcoming *vis inertiæ*, tend, in my humble judgment, to invite the public to form opinions not only detrimental to the interest which the public itself has in the proper solution of the question of dealing with the insane, but detrimental also to that position which we claim to hold in the professional world.

That some such action on my part is called for will be made evident by such quotations as follow. The public has been told on medical authority that "the devolution of incompatible duties on asylum physicians arose out of the idea that as long as lunatics were made comfortable and treated kindly, well fed, afforded religious consolation, and amused to their heart's content, little more remained to be done. As has been said, medicine could offer no further advice; and accordingly the services of one physician of experience were deemed sufficient to overlook the general health of the community. And so matters have stood down to the present day, with hardly any, if any, modification." This sentiment has been translated by the *Times* thus:—"We treat insanity as an infliction to be alleviated rather than as a malady to be studied with a view to its cure and prevention."

Now I must confess that if I represented the public I should at once say, "Away with these doctors! It is known that insanity can be cured. Yet after the millions of pounds spent by me, it is found that no attempt is made to cure my insane members, no attempt made to master the facts of disease, nothing done except to keep the poor folk quiet and comfortable. In the face of these facts a further demand is made on my purse. With the confession on their lips that they cannot make use of what I have already given them, the doctors have the assurance to ask for an expensive extension of that which they surely must have misused. I will have none of it."

Then, again representing the public, I might after reflec-

tion say, "I was led to believe that these asylums cure no one, and I was angry. I now find that no less than 40 per cent. of all kinds, young and old, strong and feeble, acute and chronic, are turned out well. I am content, and I will go to sleep again."

In either eventuality, and both may well arise, all progress will fall in danger of being stopped, and surely the blame thereof will have to be laid on an overstrong statement of the case. The solution of the difficulty will, without doubt, be delayed by hard words and recrimination between the public and asylum doctors. Instead of discord and distrust, co-operation is required, and the public, who, as I have said, is master of the situation, should be invited with the exercise of tact, to look into the matter for itself, to see if there is any undue failure in our present treatment of insanity, and then to take us into its confidence, in order that all may be benefited by its use of our knowledge of the real state of the question and its requirements.

The chief fact, on which the present discussion arises, cannot be denied. We must admit that patients are accumulating fast, and that fresh accommodation is constantly called for. This is what is said to be stirring the public mind to action. What are the causes of such accumulation? It has been broadly put to us that it arises from our failure to cure those who have not been cured. This is true in a certain sense—in the sense that the inhabitants of a cemetery accumulate because doctors have not stood between them and death. But would anyone be bold enough to say that doctors could make any radical reduction in the accumulation of the cemetery by finding out and following fresh lines of treatment? As has been pointed out, modern medical science, by overcoming bodily ailments, has procured a slightly longer life ratio, and there is reason to hope that, as our own knowledge increases, we may, by overcoming mental ailments, be rather more successful in giving a longer exemption from brain death. But there is all the difference between slow and steady progress in reducing the proportionate number of unsuccessful cases, and the wholesale rehabilitation of diseased brains, as is foreshadowed. We know well enough that our accumulation is chiefly caused by the sending to us for treatment of a number of brains that are already dead in intellect, and an equally large number of brains that are foreordained to such death, in spite of any amount of skill that the most sanguine

may desire us to possess. And it must be remembered that our recovery rate is calculated on these wrecks, as well as on cases which are either doubtlessly or doubtfully curable.

The position as between the public and ourselves is thus roughly stated by Dr. Batty Tuke:—"The public seeks in vain for any manifest indication that the specialty which professes the treatment of insanity has kept abreast in the onward march of medical science. It argues that it has performed its share of the duty in carrying out the great philanthropic work of improving the condition of the insane at a vast expenditure of money; but that, although they have had proper machinery placed at their command, asylum physicians have failed to stay the progress of the disease by the exercise of their art, and have but partially succeeded in bringing their specialty within the pale of medical science." I would point out first that, if the public believes, as is stated, that it has provided all necessary means and appliances for the successful treatment of insanity, it must have forgotten a very important fact. In the year 1845 two Bills were passed, Chapters 100 and 126. Chapter 100 is in use, and supplies the backbone of present lunacy law, but Chapter 126 pined away from want of use. Clause 27 of this latter Act ran as follows:—"And be it enacted that in the erecting and providing of every asylum to be hereafter erected or provided for the reception of pauper lunatics, and also in enlarging the same or any asylum already erected, regard shall be had to the number of patients to be provided therein who shall be or be deemed to be curable or dangerous; and in order to prevent such lunatics being excluded from admission into such asylum by reason of the admission or accumulation therein of chronic or incurable lunatics, some separate or additional building shall be provided for chronic or incurable lunatics, whenever by reason of the increase of the number of lunatics the asylum shall be insufficient for the accommodation of all lunatics entitled to be received therein, and in order to secure the immediate admission into every such asylum of all lunatics deemed curable or dangerous, a sufficient number of such chronic and incurable lunatics shall from time to time be transferred from such asylum to such separate or additional building to be provided as aforesaid."

But no effect was given to this enactment by the public, and it was repealed in 1853. Lord Shaftesbury, before the Select Committee of 1877, explained the intentions of the

promoters of the Acts in these words: "The great principle of the Act of 1845 was early treatment; we maintain that by early treatment you may reduce the amount of lunacy to a very considerable extent. The asylums were to be divided into two; there was to be the principal asylum, which was for the acute cases, and there was to be the chronic asylum alongside of it, which was for old chronic incurable cases. All the recent cases were to be sent to the principal asylum, which was to have a full medical staff, and everything which could be necessary for treatment and cure, and the other cases were to be sent to those chronic establishments."

Thus you will see that the very institutions now proposed were ordained, and yet the public took no action. The public, therefore, can hardly tell us that it has given us all that we ought to have had. Notwithstanding this failure on its part, however, asylum superintendents have not lost sight of the principle laid down, and have done their best in the face of the serious difficulties that arise from overcrowding to foster it by setting aside certain wards for the reception of acute and curable cases, and we may now say that these reception wards form as well-marked a feature of the asylum as the chapel, ball-room, and cricket ground.

But the second part of the indictment, gentlemen, is the one that stings us. Can it be good either for our specialty or for the public that the latter should be allowed to remain in its condition of badly instructed ignorance of what has been done, of the progress that has been made by alienists? I will venture to make brief remarks on three or four points which demand special attention in relation to the question whether the curative treatment of insanity is, taking all things into consideration, reasonably successful.

First it is stated that good opinions hold that the proportionate number of recoveries has not increased in the last fifty years; indeed, some go so far as to say that treatment in the beginning of this century was more successful than it is now. The latter proposition is of course preposterous. If it is true, as it undoubtedly is, that the greatest good for the *curable* insane is cure, and that the best methods of cure should be adopted, what possible justification can there be for withholding from our curable cases those more successful methods of cure that were used in the year 1800—the chains, whips, neglect, starvation, and so forth? But as to the assertion that we cure no more now than were cured before the new asylum system was started, it is

just as difficult to prove the negative, as it is to prove the positive. Figures are utterly misleading unless they are properly co-ordinated. The enumeration of facts is valueless, if the conditions in which enumeration takes place have passed beyond comparison, as they now have. Is the material to be worked up into cures the same now as it was then? Dealing with the pauper element alone, I find that in 1859 fifty-six per cent. of all pauper lunatics were in asylums, the balance being in workhouses or residing with their friends. In 1888 sixty-nine per cent. were in asylums. This means a large shifting of patients into asylums from the homes of chronic insanity. We know well, too, the effect of the bounty given to the guardians in 1874. These figures at least suggest one source of fallacy.

Then, again, what is a cure? To this day there is no definite and accepted test of recovery. But we may be sure that, looking to the swift retribution of publicity, superintendents are now more cautious in their reading of the term than they were in days gone by.

There is, again, another source of fallacy. To get a true ratio of recovery from any disease, we must ensure that all who suffer from it come under observation and treatment. The basis on which we cast our figures is created by certificates, and is very far from being an inclusive one.

Until these and similar doubts are definitely settled it will be idle to fly in the face of analogy and probability by believing that our accumulation of scientific knowledge, whether it be large or small, has been less successful than coercion and reckless drugging were in the days of old. It is surely wrong, except on demonstrable facts, to charge that the work of any liberal profession can come to a standstill.

But whether we cure more than our predecessors did, or whether we cure less, it will still be worth while before leaving the recovery ratio to invite the public to consider the magnitude of the task which it has set us. As we know, the average recovery rate for several years past has equalled forty per cent. of the admissions, the transfer cases being deducted. Of what is the balance composed? Taking the figures contained in the recent issued report of the Commissioners in Lunacy, we find the following facts. (Of course I need hardly say that they are adduced as approximate samples, and not as conclusive evidence, inasmuch as the recovery rates of different years vary slightly, and unless we could follow the history of each admission we must be content to take each

year's transactions as averages of a fairly extended period.) In the year 1888 eighteen per cent. of the admissions were epileptics or general paralytics. Then, again, twenty per cent. were fifty-five years or over in age. A considerable proportion of these at least would not be epileptics or general paralytics. Referring to another source of information, viz., an exhaustive paper on recovery rates by Dr. Chapman, which appeared in the "Journal of Mental Science" of July, 1884, I find that out of 93,443 admissions into 48 asylums in the course of 11 years, no less than 21·8 per cent. were cases of more than twelve months' standing, and at least a further 13 per cent. were of more than three months' duration. Thus in at least 35 per cent. the first three precious months were wasted, and proportionate difficulty of cure presented. Then we must take into account over four per cent. of pauper idiots, and if we make a fair allowance for obviously incurable insanity, which does not come under any of the above heads, we can well say that our available balance is very materially reduced.

We labour under another very great disadvantage. While patients in the sane world may be taken as a rule to be most desirous of cure, as helpful as they can be to the doctor, and most orderly, the very reverse is the case with our patients. In nine cases out of ten resistance takes the place of help; restlessness, suspicion, disorder, complicate every step of treatment. While from the diseased body baneful and septic agents can be to a great extent warded off, there are no means, short of deprivation of consciousness, that can shield the diseased brain from the thousand irritations to which it is exposed, in consequence of the well-nigh unlimited area of its functions.

When we consider all this, forty per cent. of recoveries is no mean achievement, and I doubt whether in the face of the difficulties of treatment general hospitals would show a much better record, were it possible to make a sound comparison of the respective circumstances of bodily and mental disease. Since the above was written I have seen the table published annually by the "Lancet," in which the results of treatment in the various metropolitan general hospitals is given. I have taken six well-known institutions, to which large schools are attached, and which state the number of those cured and those relieved, and I find that the average recovery rate of all these six comes to a little over thirty per cent. Now I am not going to be so foolish as to ask you to

make any comparison founded on these figures, for I should be myself committing a fault which I have deprecated, and that is making comparisons of figures founded on data, the value of which is quite unknown. But I will ask you this question—Will it be fair to estimate the march of general medical science by this thirty per cent.? I think that I can answer for you—certainly not. And it is not a bit more fair to take our forty per cent. as a measure of our progress. Yet again I will ask you to consider what would be the impression left on the public mind if the non-successful cases had, as with us, to be detained in general hospitals for reasons in no way connected with medical science?

Next it is implied that alienists fail in curing a due proportion of patients because they have no comprehensive pathology. We are told first by Dr. Batty Tuke that "we have no institutes, no system of so-called psychiatric medicine so firmly based on pathological principles as to meet with general acceptance; and as a consequence we have no system of treatment founded on scientific therapeutics. Treatment is as yet entirely empirical and depends mainly on good hygiene and experience." This opinion is further dealt with by the *Times* thus:—"We learn that our knowledge of the essential nature of insanity, of the causes which foster and produce it, of the means by which no doubt it could be prevented and of those by which it might sometimes be cured, is scarcely greater now than it was a hundred years ago."

The broad English of these statements is that we have no reliable pathology at all, on the lines of which rational treatment can be pursued. Now, if it is meant that we have no continuous web of pathology which shall stretch from the very radicles of disease up to the highest development thereof, we can admit the fact at once, and in that respect we shall not be far behind the general body of the profession. But if it is meant that we are without a substantial and working, though not entirely coherent, pathology, I must entirely dissent from that view. In the first place, we have been reminded of a fact that we all admit, nay, that we are all fighting for, which is that insanity is primarily and essentially an expression of disease of the body. Mental disease, is, so to speak, a proliferation of general somatic disease, and by virtue of this fact the work of those of us who have to study and treat insanity, is a proliferation of the work of the medical profession at large. Further, we arise from the

common stock of the profession and are as closely incorporated therewith as any other members who may devote their attention to one or all of the fields of professional work. In consequence we have a right to, and do as a matter of fact, avail ourselves of the general stock of pathology which belongs to the whole profession. It would be surely somewhat hard that we should be reminded that we have all the duties of the study and treatment of disease which appertain to medical men, and yet should not be able to claim the pathology, which belongs to medicine, as our chief and dominant guide. This is no special pleading—it is solid fact. Let me ask you to reflect for one moment and think whether general pathology does not guide the operations of the most recondite specialty. We are told that we can only treat symptoms. What else than symptoms can we treat? Surely only general conditions, and for the latter we must rely on general pathology.

How has general pathology been built up? First, the anatomist has taken possession of the body, and has mapped it out into as minutely separate areas as he is permitted to do by the means at his disposal. Then comes the physiologist, who, either with or without his friend the chemist, fits a duty to each of these areas, or fits an area to a duty. After him the histologist, and on the work of these pioneers the pathologist lays down his scheme of disease, ready for the therapeutist. A true and indisputable pathology cannot, unless anatomy and physiology have preceded and accurately set out the subjects of possible disease, tell us what are the exact workings of disease when it does arise, and it follows that a true pathology is entirely dependent on anatomy. Then how far has anatomy enabled pathology to advance in the territory of the brain? Through recent brilliant physiological work, pathology has commenced to lay hands on disease affecting the coarser duties of brain matter, such as motion, sensation, and so forth; but even here, as physiology has, for the time at least, outstripped anatomy, the foundation of pathology in these respects is mostly theoretical and doubtful. At this point demonstrable pathology stops short. Let us test this. Delirium, whether of exhaustion, fever, or alcohol, has been in evidence for ages past, and has pressed itself on the attention of the general medical body. So too with hysteria. Can anyone give the exact pathology of these conditions? Can we find any explanation of the cerebral symptoms, which goes beyond the general ideas of

inhibition of this, or exaggerated action of that faculty, hyperæmia or anæmia, and the like? Surely, looking to the numerous and adventurous souls who love to attack these problems, a perfect pathology of such conditions would have been struck out by general medicine, if it had been at present attainable.

Then if professed anatomists and physiologists cannot carry up their work to the scene of our labours, can we be expected to be able to carry up with us a pathology in a continuous line from the foundation of general principles? I hardly think so, and I venture to say that the failure of continuity can only be laid to our charge as members of a general profession and not as specialists.

But as the demands of those forms of disease which we treat are urgent, we have had to leave the line of experiment and exact demonstration, and have had to build for ourselves, beyond the gap left by the anatomist, a pathology as best we could. We in the first instance had to clear away the lumber of superstition and tradition. We seized on mental symptoms; we classified them; we split up confused masses of mental disease; we established a nomenclature; we fitted both symptoms and disease as closely as we could to the known facts of general pathology; our histologists have been industrious, perhaps doing as good work on the brain as has been done on any other region of the body; we have availed ourselves of the work of the somewhat low-rated psychologist; we have formed theories in default of exact information; we have corrected theory by observation, experiment, and by comparison of the results of treatment, and the outcome of all this has been a special pathology whose value can hardly be entirely neglected even by the most ardent seekers after perfection. Then, when we add these two pathologies together—the property of the general profession and our own property—we can surely speak with our enemy in the gate. We can at least deny with confidence and with truth that our treatment is so lacking a foundation of reason that it deserves the epithet of empiric.

The last point on which I shall touch here is the position which the study of insanity has taken up. There are two ways in which this has been referred to, first, as a component of the medical curriculum, and, second, the more recondite inquiry to which competent alienists apply their minds. With regard to the first, we have nothing direct to say here; and this is fortunate, as it is a broad question, the *pros* and

cons of which would, of themselves, afford material for a second address. But indirectly we have something on which to reflect, inasmuch as it has been told to the public that the reason for the exclusion of the study of insanity from the curriculum is "that the whole subject rests on such an indefinite basis that the knowledge which we possess is so scattered and unsystematized as to render it unworthy to be ranked as a department in the science." Thus have not only skilled alienists to bear the reproach of having no system of study, but they must also bear, on that account, the blame of its being omitted from the scheme of medical education. Can this be a just assertion? Let us hear what the students themselves have to say on the subject. I emphasize the fact that the study of insanity is not obligatory. Then I assert the fact, that, in spite of its not being obligatory, wherever an asylum is within reach of an educational centre, large classes, chiefly composed of the best students of their year, attend the instruction which is so freely offered to them. To take two examples which come to my hand—at Bethlem over sixty students form a class, in addition to a large number of passed men and practitioners. At Morningside more than fifty attend the asylum. Now, I can assert that if there is a person who is chary of wasting precious and all-too short time, it is a first-class medical student; and not only is such a student thrifty in time, but he is allowed to be a most keen and remorseless critic of what is put before him. That is our answer—if a highly-trained and critical student can, without pressure of any kind, except that which is put on him by a desire to gain useful knowledge, devote some of his time to the special education which is offered to him, we may rest contented with the reflection that there must be some science and system which is worth learning.

Then, too, with regard to the scientific labours of the alienist proper, are we to regard all the many books written on the disease, which command so much attention, as mere expositions of rule of thumb? In what light can we regard such work as led to the classification of the late Dr. Skae, seeking, as it did, to apply the science already belonging to the general profession to the stock of special knowledge, small as it might have been, then in the possession of alienists? It may be that in ages to come the science of the future will have so far advanced as to dwarf that of the present; but that is not the question. The existence of science in any

system of investigation is to be measured by the amount of result less than by general intention, and there is no evidence that the alienist does not apply the same lines and methods of scientific thought as he would have, had he, after a compulsory general training, chosen another field of work in the profession. I earnestly trust, gentlemen, that in what I have said thus far, I have you with me, if not in all details, yet in the more important arguments; I still more earnestly trust that the use of these arguments will not be taken to be the expression of an ultra-conservative satisfaction with the present state of our knowledge. Were it so, we should, indeed, put ourselves outside the pale of science. We know and confess that we are, equally with others, open to improvement, and we desire to attain that improvement. But the desire will not absolve us from the duty of asserting the truth in justice not only to the public, but to ourselves, and to the many distinguished workers who have passed away.

I now turn to the main subject of my address. I will not trouble you with the review of the reasons why hospitals for the insane should be erected, for we will assume that the demand for them is sufficiently obvious.* Nor will I trouble you with any mention of expense. I propose to give you my views as to the various points to which we should work, and we will express the hope that even if we cannot at present attain the complete accomplishment of our desires, we shall get some small beginnings, and earn a fuller expansion of them by showing results commensurate with the money spent.

It will be necessary first to point out that two distinct classes of hospitals are aimed at. The first is what we may call a county hospital, in which the cure of the patients admitted shall be the paramount object, the extent of scientific study depending on the aptitude of the staff. The second is the educational hospital, in which, while of course the good of the patient will not be lost sight of, the advance of science shall be the guiding principle. As the respective objects vary to a certain degree, so will the details of con-

* Much valuable information on this subject will be found in the report of the Select Committee of the House of Commons which inquired into the Lunacy Law (1877), notably in the evidence given by Lord Shaftesbury, and the Honble. F. Scott from the administrative side, and by Sir J. Crichton Browne, Dr. Mortimer Granville and others from the medical side of the question. Among other interesting papers are those of Dr. Strahan (Berrywood), in the "Journal of Mental Science," of July, 1885, and Dr. Ernest White (Stone), in the "Lancet," August 30th and Dec. 27th, 1884.

struction and service vary, and for this reason it is essential that the considerations of the two institutions shall be kept separate.

Taking the county hospital, the location thereof will be the first point to be settled. There can be no doubt that for the convenience of administration it must be within very easy distance of the main building. But it should not be immediately adjacent, or there will be danger that the central idea of separation from the "chronic" will be prejudiced It will be a great gain also if the main building were out of sight, so that new patients should not be reminded of the doom that may await them. We need say little about aspect or elevation, as these points will have to be determined by local considerations and by well-known hygienic laws.

But the size of the hospital will be a matter for careful thought. From the various considerations of the curability of all admissions, which I have given before, we may, I think with fairness, assume that sixty per cent. of the admissions might be considered as *possibly* curable, and, therefore, suitable for admission into the hospital. We may further assume that a year's residence should be the limit for doubtful cases, and that three months would be sufficient for the recovery of the most simple cases. Then the number of residents would be reduced by death, which, as we know, chiefly occurs soon after admission. It is extremely difficult to arrive at anything like certainty, but I should think that four months might be taken as about the average time which would elapse in a series of cases before either discharge on recovery, death, or transfer to the main building on account of incurability took place. This would give an average clearing of each bed in the hospital three times in the course of the year. The average ratio of admissions into county and borough asylums to average population thereof is about as 1 to $3\frac{1}{2}$. Applying these figures to an asylum now containing 1,000 patients, the admissions would number 285, of which 170 would be deemed possibly curable. Then we divide this sum by three, that being the number of the average clearances of each bed in the course of the year, and we might put the quotient roughly at 60. But it would not be safe to build for this amount only, for, as we know, sometimes a series of obstinate cases comes in, and these might increase the average duration of residence. Let us assume, then, that accommodation for sixty-six would

be required, and we obtain the following formula: the hospital accommodation should equal one-fifteenth part of the asylum population.

If my premiss as to the average residence in the hospital is correct, the experiment would be far less formidable than would appear at first sight. Of course, for a time the population of the asylum would be decreased, but the vacant room would be in course of time filled up by the increase in total population of the locality, and, with this fact in mind, it would be desirable to build the hospital with a view to slight enlargement when required.

As to the arrangements of the hospital itself, only a few general suggestions can be made. Wards should find no place here. No room should be allowed to contain more than six patients at the outside, and where provision is made for association it should chiefly be for quiet melancholiacs, and, conversely, separation should be chiefly practised in cases of mania. No fact has been more impressed on my mind than that separation from other patients, and, indeed, from other people, tends to shorten and decrease excitement, and I can confidently say that not only the extent, but the nature even of an attack of acute mania is beneficially influenced by comparative solitude. Therefore the proportion of single rooms should be considerable. The difficulties of keeping up observation, which are now met in an asylum by placing a considerable quantity of patients together, must be met in the hospital by increase in the number of attendants. The exercise of ingenuity in arranging the relation of the rooms will, however, be rewarded by fewer attendants being required. The increase in the number of hospital attendants would be compensated in some measure by the decrease that would occur in the asylum in consequence of the withdrawal therefrom of so many acute cases. Of course padded and specially prepared rooms would be found in the hospital, though the number of the former would be reduced by the exclusion of paralytic and similar cases. There will also be a necessity for a small infirmary. Generally speaking, the furnishing and the decoration of the hospital should be more like that of an ordinary house than is the case in an asylum. Of course we may get a patient who may do a considerable amount of damage, but with a great proportion of cases it may be taken to be a rule that the more there is to smash the less temptation to smash will there be, and the cost of what

smashes there may be will be amply repaid by the beneficial effect that the ordinary surroundings of sanity will have on the bulk of the patients.

The provisions for exercise, labour, and occupation of the patients will be a matter of considerable difficulty, as the general principle of the hospital will be separation from the chronic cases. It may be worth while to start a small separate garden and laundry and a small workshop or two solely for the inmates of the hospital. As to organized amusements, there will not be so much difficulty. There will not be the same demand for them as in the asylum. But simple games and other means of recreation will be most desirable.

The special attributes of a general hospital would be naturally provided for, such as laboratory, post-mortem room, and probably sooner or later a complete system of medical baths, including the Turkish bath, would be furnished.

Now and then the principle of separation of acute from chronic would have to be broken for disciplinary purposes, as a visit to the main asylum would have a good effect on troublesome cases of moral insanity.

As to the staff, one fact stands out strongly, and that is, that the doctor, who is head of the large asylum, should be also head of the hospital. There can be no doubt as to this. It may be that a supposed chronic case shows unexpected signs of recovery, and it may be that a case in the hospital reveals unmistakable signs of a hopeless condition before the year of probation is out. Interchange under these circumstances should be determined by one head only. The staff also must be rapidly interchangeable, and there must be only one system of administration in both buildings, though the details would vary. It would be disastrous if there were any division of authority. Then there is another point on which I shall have more to say later on. If possible, it would be a great thing that the superintendent should be encouraged to avail himself of the aid of an outside physician. Now he has the power in urgent or peculiar cases, which threaten serious consequences, to call in such aid; but I should like to see this power so extended that almost as a matter of course a competent physician should be authorized to place his services from day to day at the disposal, and under the responsibility of the superintendent, if such a course were possible. Then I should say that the

senior assistant medical officer should reside in the hospital, and, if the asylum were large enough to support three assistants, that the junior should also be resident there, the second taking charge of the main building. Provision should also be made for resident clinical clerks, and the period of their asylum residence should be allowed to count in the reckoning of their compulsory clinical work. There would be a lot of work that would be just as well done by them as by the assistant officers.

The attendants and nurses should be chosen from two sources, a few skilled ones from the outside for the cases demanding more especially the nursing of a general hospital, the remainder being taken from the staff of the asylum itself. The wages of all should be relatively higher than those given in the asylum, and the whole of the asylum staff should be encouraged to view the appointment to the service of the hospital as a mark of honour as well as a source of increased emoluments. The head attendants should, of course, be specially picked persons, and in the appointment both of head attendants and their subordinates, seniority should certainly give way to special aptitude. No one that has had experience of attendants can have failed to notice that some people have a happy knack of dealing with the insane, which makes its possessors almost beyond price, and which should give them the priority. Of the patients themselves I need say nothing, as they must necessarily be taken in for one reason only—presumed curability.

I now pass to the second class of hospitals—those which I have styled educational hospitals. What I have already said as to the general structure and the subordinate staff will apply here also, and need not be repeated. But on some other points there will be a good deal to say.

The matter of location will be determined by accessibility for teachers and students, as propinquity to a school of medicine will be the chief *raison d'être.* Probably London would be the first to erect such a hospital, but we should hope that if the experiment succeeded, which it would be bound to do, others would follow in Edinburgh, Glasgow, Dublin, and other educational centres.

We have here no such guide to size as we have in the county hospital, since convenience of treatment must be the measure. One hundred and fifty inmates should be, I think, the outside limit.

The selection of patients would be matter of grave con-

sideration. Selection it would have to be, for naturally a hospital built large enough to receive all the curable cases of a district which supports a medical school would be so large that the individual study of cases would be lost sight of. Nor should curability be an inflexible test, for obvious reasons. One rule, however, should be laid down, and that is that fancy or show cases should have the smallest possible representation; at all events for some time to come. I have adverted to the enormous difficulties in the study of mental disease, and it will be quite time enough to study recondite forms or varieties of disease when the mechanism of the simplest cases has been elucidated. Cases of so called acute dementia, of simple mania and of simple melancholia, uncomplicated if possible with delusions, and certainly uncomplicated by organized or fixed delusion, should have the first and most liberal right of entry, and in these every endeavour should be made to connect general mental with special bodily abnormalities. Especial attention, for instance, should be given to the connection between the presence of morbid products in the blood, morbid heart conditions and blood pressures, with various forms of insanity, and so forth. Not that we do not know a good deal of these matters, but I suggest them as samples of the class of points on which the full weight of our new armament should be brought to bear. When such cases have been provided for, we should next choose some that are obviously connected with some well-marked bodily condition, such as the puerperal state, phthisis, syphilis, or gout. Then we may go back again to various forms of insanity marked by delusions. Next, we should open the doors to cases passing from acute to chronic, and we may well find room for a few chronic cases typical of the main varieties of insanity, for in studying the losing and the loss of intellect, we may reasonably expect to find traces of the conditions which cause the loss; and further, such cases are useful for comparison, and specially for the purposes of teaching. Finally, one or two carefully selected specimens of each phase of general paralysis will complete a collection that seems to me to afford the most useful basis of study, both to the younger student and to the more advanced observer. It will be obvious that much careful adjustment will be required to insure such a selection as the above. If the hospital is situated, as it probably would be, at a considerable distance from the asylum proper, it will be obviously wrong that the patient should be prejudiced by

being brought to the hospital only to be relegated to the asylum as unsuitable for admission into the former. Who is to make the selection? I confess that I see some difficulty in this direction, though it may be partially solved in a manner to which I will refer later on. There is yet another question: Shall paying patients be admitted? I should say not, at first, for as the first hospital will probably be built with ratepayers' money, the ratepayers should have all the benefit. But no doubt if the experiment succeeded, private benevolence would come forward to aid in founding institutions, which would stand in a similar relation to registered hospitals for the insane.

A very burning question will be that of the composition of the medical staff. It has been claimed that the physicians should be entirely chosen from the outside. On the other hand, there are many who would say that trained alienists should be alone selected. I declare for a middle course—some alienist work, and some non-alienist. I assure you that I do not say this in any sense as a concession to the claim advanced in some quarters that insanity, being only a symptom of physical disease, should be treated by those that have to deal with all other symptoms. I do not admit such a claim for a moment. While, as we have said, it would be entirely fallacious to contend that insanity is not an expression of somatic disease, it will be equally fallacious to deny that the exigencies of the symptom so far transcend the importance of the basis that practical utility demands the services of those experienced in their regulation. But if, on the other hand, general medicine takes charge of the hospital, the symptom will undoubtedly get the upper hand of the physical basis, and psychological medicine will be but little better off, while general medicine will lose the services of good men. On the other hand, if alienists have the sole charge, we shall be imperilling a good half of the purposes for which the hospital is founded. We cannot deny that the field of insanity is so large that, although in practice we can deal with it efficiently, yet when it comes to the question of the working out of theoretical details, the more ardently the inquirer works at the psychological aspect the less ardently can he work at the physical aspect. Therefore, I say that both general and special medical knowledge should be employed, and encouraged to play into each other's hands.

But the adjustment of the various duties of both will be

extremely delicate and difficult. In the dealing with the insane there is one element whose influence is all-pervading and oppressive. It is the element of responsibility. The responsibility of the general physician is as nothing compared to that of the alienist. Every action of ours has to be scanned with a view to the ultimate incidence of possible responsibility. I trust that you will not think that I am fanning the expiring ashes of contention when I say that responsibility is one of the chief causes of that failure to increase our recovery ratio, for which we are held answerable. We are debarred from trying experiments, which, though in nine cases out of ten may supply the starting point of recovery, yet may in the tenth produce the most disastrous consequences, not necessarily confined in their results to the course of the disease, and not even to the person of the patient. I venture also to say that responsibility is the cause of so many multifarious duties being thrown on our shoulders. It is not as if our patients could follow or not follow our advice as they chose, and thus take the responsibility on themselves. We have to take the responsibility for them even down to such mundane details as seeing that they have proper food, clothing, and exercise. It is a pity that such hindrances should be placed in our way, but so it is, and we have to accept the position, and this element must be reckoned with. Who, then, shall take the responsibility? Undoubtedly those who have been accustomed to work under it. And he who bears responsibility must needs have the chief authority. This is a cardinal point, that authority must, wherever responsibility extends, be in the hands of the alienist.

Then, as we contemplate a combination of special and general medical service, it will follow that there will be both a resident and visiting staff. I am strongly of opinion that the authority should rest with the resident portion of the staff, precedent to the contrary notwithstanding. Responsibility is incurred all round the clock, and authority should rest with those who, by continuous familiarity with the workings of the institution, as well as the details of each individual case, are best qualified to meet the demands of responsibility, rather than with those whose visits are spread over but a short period of the day. I repeat again that the circumstances of a hospital for the insane are quite different to those of a general hospital, and therefore the visiting staff, who in the latter would have extended authority, must

be content in the former with the powers of teaching and treating, but not of administration.

Further, as it would be only right and to be expected that there should be a certain amount of lay direction, I will strongly urge that the Committee of Management should be a small one, and only composed of those who by their aptitude and capacity for continuous work are known to be best qualified to help. A large Committee would undoubtedly prejudice, if not stifle, the working out of the principles of a delicate and novel experiment, if, as often is the case, the work were done by the few, while the remainder only interfered on important and critical occasions, just when they would be least qualified to record their votes.

We have got thus far, that the resident staff should have the authority, and naturally the senior member would be paramount. Such a man should be far above an ordinary resident medical officer. He should be of mature experience, should have had large responsible charge of the insane, should be of an age and moral force sufficient to maintain under difficulties his position, without having constantly to fight to hold his own; and, as a corollary, his stipend should be ample. He should be encouraged to remain in the service of the hospital, and he should be induced to view his position less as a stepping-stone to something better, than as a great opportunity of developing the full resources of an experimental institution. He should have the choosing and the dismissing of the nursing staff; he should have the responsibility of seeing that all the books and papers required by law are duly filled up; and, further, he should have the final voice in selecting and discharging the patients. At first there will be, as I said before, a difficulty in selecting the right sort of patient, and the proposal for admission would in the first instance come from the medical officer of the various contributing parishes, with whom the resident physician should be in constant communication. If necessary, in doubtful cases, he should have the power to either go himself or send one of his juniors to make the requisite examination of the patient. He should have also a direct share in the clinical teaching, as well as the duty of selecting from the bulk of the resident patients the proper cases for the work of the visiting staff; and he should have the power of regulating the independent clinical work of the students themselves, as it would obviously be dangerous to allow them a free run all over the institution.

Under him should be at least two assistant physicians, one of whom should be a very competent master of morbid anatomy. Resident pupils should also be provided for, to any extent which might be found convenient.

Then as to the visiting staff. I should think that at least two alienists should have each a clinique assigned to them, and that each clinique should be a mixed one, that is to say, the field of either should not be confined to one sex or to one form or class of mental disease. The visiting alienists should, of course, have full power to conduct the direct medical treatment of the cases submitted to them, but in matters involving a risk, such as the granting of leave of absence and final discharge, their authority must be subordinate to that of the resident physician. This may seem to be affording an invitation to discord; but we must trust that, while the resident will be wise enough to fall in with suggestions of the visitor on these points, protecting himself by writings, if necessary, from moral responsibility, the visitor will recognize the legal responsibility thrown on his resident colleague, and will not press his opinions inconveniently. The chief duties of the visiting alienists will be those of teaching, and this should be both systematic and clinical, and be conducted much on the lines of a general hospital.

The last and most difficult question will be the adjustment of the relations between the alienists and the general physicians. Of these latter there should also be at least two, one skilled in all-round medicine and the other more especially in neurological conditions. Both should be on the staff of a general hospital, and both should have extended knowledge of physiology and its most recent advances. It will be their especial duty to endeavour to detect the least departure from normal bodily health, and they should work quite as much by the exclusion of the normal as by the following up of the abnormal. They should be required to conduct a thorough bodily examination of each case on admission, to renew these examinations from time to time, to order and supervise such methods of clinical inquiry as they may think fit, such as the use of the sphygmograph, quantitative and qualitative analyses, and so on. They would undoubtedly find a sufficiency of interesting material on which to found frequent clinical lectures. Then, too, they should cause the fullest and most exact records to be kept of their observations, and these should be the pro-

perty of the whole staff, as by them would be forwarded one prime object of the institution, viz., the collation of psychical and physical abnormalities. I am conscious that the subordination of the non-alienistic to the alienistic element may be somewhat deterrent to senior general physicians, but I am not sure that the work to be done would not be quite as well done by younger men, inasmuch as the latter would have more time, unabsorbed by the demands of extensive practice. In any case, they will have to approach their duties with a determination to show the forbearance and self-abnegation which will be required all round for the carrying out of this grand experiment.

It is almost unnecessary to say that class-rooms, pathological laboratories and other similar means of education should be provided to the fullest extent. Further, there could now be met a want, which has often been recognized but never supplied, the establishment of a comprehensive reference library of psychological medicine.

There is now but one further point, on which I will speak quite briefly. It is not exactly our business to go further than we have done in the direction of preventing the spread of insanity in the population as a whole. We have lifted our voices in serious warning, and have denounced certain risks; but while the public will persist in intermarrying, in marrying and giving in marriage individuals who either in person or by heredity are in danger of handing on insanity; while the public persists in straining the endurance of frail and unstable brains, by over-indulgences in every direction, we can do but little more. The very conditions which beget insanity tend to lessen correct judgment in these matters, and we can but expect the perpetuation of the disease, in spite of the soundest and best intentioned warnings. But we can do something, we hope, in preventing threatenings of insanity in the individual passing beyond the initial stages. If out-patient departments can be got to work on a comparatively large scale, no doubt much can be done. At first the public cannot be expected to forego to any great extent its reticence and desire to keep alienation to itself; but if by means of a hospital such as we have been discussing it can be got to see that there is help for it, short of the asylum, to which help it can resort without a loss of liberty, I cannot but think that eventually it will be induced to come readily and in good time to ask for treatment. Great benefit would

especially accrue in cases where an ex-patient had threatenings of a fresh attack. Here, the data of the case being to a certain extent known, prompt medical treatment would have a fairer field. If we think about it, we must see how very little help can be given under the present system to those who from a demonstrated tendency require it the most.

The hospital system should therefore be extended to cover such a probability of the public resorting to it for advice. Such departments should be attached to both county and educational hospitals. At first it will be better to have the out-patient department entirely separate, and at some little distance from the hospital itself, and at first also the attendance on it of students would have to be confined to very small limits, lest the fear of publicity should stifle the first beginnings of the better feeling concerning mental disease.

Now, can all this scheme be worked out without any alteration in the present law? As far as I can see, but little modification, if any, would be required. The hospitals would be in every sense branches of the asylums to which they were attached, and would therefore come under the existing regulations. This would remove one great difficulty; if the law had again to be altered, our recent experience would lead us to fear fatal delay. But when another Act is contemplated I should hope to see a provision made in it for the application of the "voluntary boarder" system to pauper asylums. It will surely be wiser to give every opportunity of arresting insanity before it reaches the stage of certificates than to wait till it has been legally established. If these hospitals should be erected, we may expect that voluntary patients would be found to resort to them more readily than they would to present asylums.

I have now finished, gentlemen, and must thank you for your patient hearing of this sketch, slight as it must needs be from consideration of time. I know that there must be many divergent opinions as to the proper development of an hospital for the study of insanity, and I fear that possibly I may not have hit off the ideas of a majority of those interested, but I am convinced that there are many among us who are both able and desirous to correct mistakes and supply deficiencies.

On the Provision for the Insane Poor in the Future.

By D. Hack Tuke, F.R.C.P.

(Read at the B.M.A. Meeting, Aug. 14.*)*

Should the future provision for the insane poor in Yorkshire, and not in this county only, but in other counties of England, be conducted on the same lines as the past provision has been?

This paper aims at being something more than historical, and faces the practical questions which naturally arise from the survey which I have just made.

At least four questions arise?

I. Can the boarding-out of pauper patients with strangers be introduced into Yorkshire on a sufficiently large scale to sensibly relieve asylums from the pressure which, judging from the past, will be their experience in the future?

II. Is it possible to relieve the pressure on asylums by paying a more liberal sum for the maintenance of harmless and incurable patients in their own homes?

III. To what extent ought workhouses to be utilized? Has this utilization been carried as far as it suitably can be in providing accommodation for incurable lunatics?

IV. Closely connected with this question is the consideration of the operation of the Government Capitation Grant.

V. Lastly, would it have been wiser to build two asylums instead of one so as to provide a comparatively small establishment for the recent and acute cases, and another of a less expensive character for the demented, and, as part of the same question, should the smaller institution be on the same estate and under the same management as the other?

Unless we are prepared to maintain that the provision made for the insane and idiotic is as perfect in its character as the wit of man can devise, that there is no reasonable probability of preventing the enlargement of existing institutions by developing the home or cottage care of this class, or providing more lunatic wards in workhouses, or that if more asylums have to be built they cannot be planned more wisely than in the past, I say, unless we are justified in taking this optimistic position, there is an ample field for practical advice from those who are constantly engaged in attending to the needs of the indigent insane. Even if we decide that nothing better can be done in the future than has been done in the past, there will be the satisfaction of having obtained this testimony from those who are competent to judge.

I. Should anyone present chance to have read my article on the "Boarding-Out System in Scotland" in the "Journal of Mental Science" of January last, he will allow that I am no enemy to the system, but that, on the contrary, I am likely to be hopeful rather than despondent as to the effect of its application to the congested lunatic districts of Yorkshire. And when one reads what Dr. Rutherford says in his last Report, that by adopting this remedy the number of pauper patients in the asylum belonging to the district in which it is located, so far from increasing, has actually diminished during the period between 1869 and 1888, I say, when we see such a happy result as this, one cannot but ardently desire to see a similar course pursued in this county, provided only that it be practicable, beneficial to the patients, and (what is too often overlooked) not harmful to the families in which they reside.

Before, however, recommending the system of boarding-out pauper lunatics as one means of preventing or lessening the accumulation of this class in public asylums, it is surely wise to ascertain what conclusions have been already arrived at in this matter by those on the spot competent to judge, and who are only too anxious that it should succeed. Now, Dr. Mitchell, the late Superintendent of the Wadsley Asylum, and Dr. Major, of the Wakefield Asylum, seriously contemplated carrying out the Scotch system some years ago. They came, however, to the decided conclusion that it was not practicable to adopt it in Yorkshire, mainly on account of the character and density of the population they had to deal with. Dr. Bevan Lewis is unfortunately driven to precisely the same conclusion, and holds that the objections to boarding-out in Yorkshire are legion, that is, using the term "boarding-out" in the sense in which it is generally employed, of placing patients with strangers for profit.*

II. Although, however, boarding-out the insane poor on the Scotch system appears to be impracticable, or, at least, injudicious in Yorkshire, a good deal has been done in sending from the asylums suitable cases home to their friends, which although one form of boarding-out, is better understood as the "trial-out system." This meets with Dr. Bevan Lewis's approval. Again, in the annual report of the Wadsley Asylum for 1883,

* I have vainly endeavoured to discover how many of this class are scattered about in Yorkshire, but the number is stated to be extremely small. I have obtained returns from Scarborough, Barnsley, Doncaster, Halifax, Pontefract, Sheffield, Holbeck, Wakefield, Wharfdale, Wortley, and N. Brierley, arranged under three heads:—In Lodgings and Boarded-out, 1. With Relatives, 175. Alone or in Almshouses, 9. Total, 185.

it is stated that 46 patients had been discharged to the care of their friends, having improved or become so feeble that they could with safety and convenience be entrusted to the care of relatives. In the reports for 1886 and 1887, Dr. Mitchell states that the decision of the Committee to grant to patients discharged on trial a weekly sum equivalent to the cost of their maintenance in the asylum, has been attended with satisfactory results, Dr. Mitchell observing that "as only a small proportion of the cases thus dealt with have been sent back, the result of the efforts made to avert, by such means, the pressure on the accommodation of the asylum and to meet the requirements of fresh cases may be said to have been fairly successful."

Dr. Merson, of the Hull Borough Asylum, whose experience is quite in accordance with that of Dr. Mitchell, informs me that many of the harmless cases are, in his opinion, much better with their friends, when the latter can be induced to take them. In Hull, he finds that the friends, as a rule, are willing, and even anxious, to take charge of such cases without remuneration. During the ten years of his residence there, he has admitted 722 pauper patients. Of these, 100 who were deemed incurable and suitable for home-life were given up to the care of friends, with the exception of about ten sent to the workhouse. Sixty-seven have not been returned to the asylum at all. Thirty-three were sent back to it, but most of them after a considerable time. Of these, 11 were again entrusted to the care of their friends, so that 78 of the 100 so treated are still outside the asylum. There are no lunatics boarded out with strangers in Hull.

If the friends are able to take back these chronic cases without remuneration, well and good, but I think that, as a rule, it will be found necessary to give it.

I am glad to see that Dr. Chapman, in his last report of the Hereford Asylum, has dwelt strongly on the point of granting more liberal allowance to the relatives of patients kept at home, and recommends the grant of 5s., 6s., or 7s. a week, whereas at present it rarely exceeds half-a-crown. He advises that for all pauper lunatics "the County Council should have power to determine whether a patient should be placed in an asylum, the workhouse, or with their friends or others, with power to order the allowance in the latter instance, and to arrange for adequate inspection." This is just one of the points in which we may be of use in advising the new authorities in regard to their proceedings in the care of the insane poor.

You are aware that Dr. Duckworth Williams, the late Super-

intendent of the Sussex County Asylum, staved off the evil day of having to erect additional buildings by making provision for a considerable number of quiet and harmless cases outside the asylum. I have obtained from him the exact result of his praiseworthy endeavours in this direction, and, seeing that what he has done has proved so successful, it is probable that the same plan may be pursued, to some extent at least, in this county. I say "to some extent," because conditions may exist in Yorkshire which are not so favourable to the success of the experiment as obtain in Sussex.

Dr. Williams was appointed Superintendent of the Hayward's Heath Asylum in 1869, when the beds were being rapidly filled up by an annual excess of 25 admissions over discharge and deaths. As the population of Sussex was steadily rising, a still greater increase was to be expected. Well, during the 18 years Dr. Williams was Superintendent, he, by encouraging, or rather pushing, the discharge of chronic and harmless cases to the care of their friends, reduced the average yearly increase to 10 patients, and by that means saved the county the expense of building another asylum.

From time to time cases were picked out which were considered fit for trial, and having ascertained that the relatives were both willing and able to receive the patient, Dr. Williams recommended him for discharge in the usual way. He was able to report after a trial of $2\frac{1}{2}$ years that the anticipations entertained of the feasibility of this plan had been most encouragingly fulfilled. Fifty cases were discharged to the care of their friends, with the result that 23 remained with them, only six returned to the asylum, two died, one had to go to the workhouse, while 10 started again in life to resume their former avocations. (Result unknown in eight cases.) During the whole period of 18 years ending Jan. 1st, 1888, 600 chronic lunatics, or 15 per cent. of the admissions, were discharged either to the care of friends or to the workhouse. How many of these went to the latter, and how many to their friends, I cannot ascertain. During the six years ending Jan 1st., 1888, however, 132 of 277 discharges were sent to the workhouse and the remaining 145 were placed under the care of relatives.

In the evidence which Dr. Williams gave in 1877 before a Select Committee of the House of Commons, he urged an amendment of the present laws by which the boarding-out of pauper lunatics with relatives and others might be facilitated. I think his proposals were very wise, namely, that the county asylum should be the head-quarters of all the pauper lunacy in

the county; that all lunatics should be on the books of the institution; that all chronic and harmless cases boarded with relatives or sent to workhouses should be retained on the asylum register. It was also proposed that they should be visited weekly by the Union Medical Officer, and quarterly by a medical man on the asylum staff, who should have the power to at once send away on his sole authority any case which he may consider should be readmitted into the asylum. Further, that the Union Medical Officer should at once report to the Medical Superintendent any change he might notice in the patients he visited, and that the Committee of the asylum should have power to order an allowance to be made to the person with whom a lunatic is boarded.

We have now a complex Lunacy Act in which these wise proposals have been to a certain extent recognized. Section 40 enacts that when the Asylum Committee is satisfied, on application from the relative or friend of a patient confined in an asylum, that he will properly care for him and is approved by the Guardians,* the patient may be delivered over accordingly, and the authority liable for the maintenance of the lunatic shall pay to the person to whom the lunatic is delivered such allowance, not exceeding the expenses incurred in the asylum, as such authority may on the recommendation of the Committee of Visitors think proper. It is also provided that the patient should be visited once in every three months by a medical officer of the district of the Union in which the lunatic is resident, and such medical officer shall within three days after each visit report the result thereof to the Committee of Visitors to the asylum. It will be admitted that this is a very important section. Dr. Williams informs me that if his proposals had been adopted when he was Superintendent, he could have easily doubled the number of out-door lunatic paupers. While I do not believe that what is true of Sussex would to anything like the same degree be true of Yorkshire, I am heartily glad that facilities and inducements will soon be in operation along with some, at least, of the safeguards which are absolutely essential to the suitable carrying out of the system of out-door relief to chronic pauper lunatics.†

* If the proposed residence is outside the limits of the Union to which the lunatic is chargeable, the approval of a justice having jurisdiction in the place where the relative or friend resides must also be obtained.

† Sub-section 5 of this Section enacts that so long as an allowance is paid, the lunatic shall not be deemed a pauper lunatic in an asylum for the purposes of the Lunatic Act, 1853, Sect. 66.

As to the proportion of cases which are likely to be cared for either with their friends or others, I think that at the very outside it will be 10 per cent., more probably eight. At present it is about five per cent. in Yorkshire, and seven or eight per cent. in England and Wales.

III. There can be no doubt that very great relief indeed has been afforded to the Yorkshire asylums by the judicious use of the union workhouse. The extent to which workhouses can be properly utilized or even extended as substitutes for county asylums must always depend upon a careful selection being made of the chronic cases proposed to be sent there. Dr. Mitchell, in a letter recently addressed to me, speaking of his experience at the Wadsley Asylum, says that they were able to transfer far more patients to their respective workhouses than to the care of their relatives, and that he had the less hesitation in pressing this course as he knew that the imbecile wards of the West Riding Workhouses were, on the whole, very well managed, and he goes so far as to say that he had reason to believe that the patients were happier and more contented than they were in the asylum, as they could visit or could be visited by their friends much more frequently than when confined in the latter. In one of his annual Reports (1885), Dr. Mitchell expresses his regret that "the policy of providing for suitable cases in workhouse-wards which has the approval of the Commissioners in Lunacy, and which has been repeatedly advocated as not detrimental to the class of patients concerned, is not more generally followed. The immediate effect of refusal to act upon it on the part of any union may relieve local rates, but the course can hardly be right and just towards other unions, which adopt a different and, it is contended, a wiser view. One policy has the tendency to avert—the other to render constantly necessary—the call for costly asylum extension and new institutions out of proportion to the number of cases which require, or can be benefited by the more expensive accommodation."

Dr. Bevan Lewis has kindly favoured me with his experience on this vitally practical question, and arrives at the conclusion that "there is no remedy for the relief of our choked up asylums beyond a far greater development of the lunacy wards of our union workhouses, better managed and officered than they now are." This is a very important observation, and when we speak of workhouses we ought to make it clear that we mean workhouses prepared for the admission and proper care of lunatics.

The Commissioners in Lunacy have on several occasions brought the unnecessary removal of chronic and harmless cases from workhouses to asylums under the notice of the Local Government Board, and have obtained from the superintendents a return of patients who might be taken care of in workhouses :—

1. In special lunatic wards.
2. In workhouse infirmaries with paid nurses.
3. In ordinary workhouse wards.

The returns thus obtained convinced the Commissioners in Lunacy that a very considerable proportion of the present asylum population might be adequately and more economically provided for in workhouses. It is gratifying to find that their inspection of workhouses satisfied them that on the whole "the treatment of the insane and imbecile inmates is fairly good, and that Boards of Guardians will frequently adopt reasonable suggestions for their improvement. In many workhouses, indeed, the services of these inmates are most valuable and save the cost of much paid labour" (39th Report, page 114).

Having for many years taken a special interest in the insane in workhouses, I may say that my experience is in accordance with these observations.

As to the percentage of cases which may properly find shelter in workhouses, it may be put at 25 per cent. at least. At present it stands in Yorkshire at 22·7.

IV. This brings me to the operation of the Government Capitation Grant of 4s. a week to the Guardians in aid of the maintenance of each pauper lunatic maintained in county and borough asylums. Unquestionably the original intention of the Legislature in allowing this grant was praiseworthy, having for its object the encouragement of Guardians to send recent and curable cases to asylums instead of retaining them in workhouses from motives of economy. Its operation, however, has extended far beyond this desirable result, and the feeling and experience of the Superintendents of the Yorkshire asylums have been, and are, strongly averse to this unfortunate grant.

I could bring an overpowering amount of testimony in support of this conclusion. As I am aware that some are still unconvinced, I must be allowed to quote the observation of the present Medical Superintendent of the Wakefield Asylum in a letter received from him a few months ago: "The Capitation Grant," he writes, "has been most demoralizing in Yorkshire, and my experience of the co-operation of union and asylum work has been far from cheering."

I learn from a recent letter from Dr. Mitchell that about eight or ten years ago the Halifax Guardians, influenced by the fact that this grant would come into operation, and being in want of room, actually appropriated the imbecile ward for general purposes, and sent Wadsley the whole of the imbeciles —some 140—of a class "wholly suitable for workhouse treatment, and who had been very well treated there." As the patients were near their former homes and relatives, they complained bitterly of being removed so far away from their old surroundings. These patients, Dr. Mitchell says, are still at Wadsley.

The remedy for the mischievous working of this grant lies, it seems to me, in extending its operation (if retained at all) to workhouses and cases of out-door relief. Other modes of re-apportioning the grant have been proposed, but I think that this re-adjustment would be the simplest, and would go far in effectually removing the temptation to transfer chronic cases from workhouses to asylums. In consequence of the recent Local Government Act, the Capitation Grant is now paid by the County Councils out of the funds they receive from the Probate Duty and Licenses which were formerly paid direct to the Imperial Treasury, but I have the best authority for stating that the County Councils have no authority for making any change in the mode of distribution of the grant. For this the sanction of Parliament will be required.

V. Passing on now to the last question, namely, whether it would have been wise to build two moderately sized asylums instead of one large one—the acute cases being located in one institution and the dements in the other—I have partly anticipated the reply in my Address when speaking of the Menston Asylum. I have no doubt that county lunatic asylums, wherever erected, should be more differentiated than was the case in former days. There should be the means of treating acute cases in a separate hospital block, one in the construction of which no reasonable expense ought to be spared, or there should be a hospital at some distance from the asylum on the lines laid down by Dr. Newington in his recent Presidential Address. For the chronic class of patients other buildings, constructed much more cheaply, will doubtless suffice. The number of patients must, in any case, be large, but it is hoped that the evils resulting from enormous masses of the insane being collected together in one building will be avoided in future more than it has been in the past, although I can by no means go so far as to assert with some that our present asylums are

manufactories of dementia. Nor am I prepared to endorse the outspoken remark of the Medical Superintendent of one of our largest asylums, who said to me the other day: "The talk about separate asylums for the curable is all humbug. The advantage of our monster asylums is this—that a patient is left to himself; whereas, if you'd tinkered him with drugs, you would have made a chronic maniac of him!" While fully approving, however, of the separate treatment of acute cases in a hospital on the same grounds as the other blocks or elsewhere, I confess that I am not so sanguine as to the curative results as many are. In considering the amount of provision which ought to be made for curable and recent cases of insanity, I must say at once that at the very root of this question lies a fact which we are slow to recognize, and, when recognized, are unwilling to admit, but one which, it appears to me, it is idle to ignore, namely, that "recent" and "curable" cases are sadly far from being convertible terms, that the curability of insanity has been greatly exaggerated, and that if the liability to relapse is honestly taken into account, we shall be able to understand the disappointment felt in regard to the results of the conscientious and praiseworthy county care which has been extended to the insane poor, and we shall be guided to sound practical conclusions as to the extent of asylum accommodation which we ought to place at the disposal of the curable insane. It surely behoves us, before we speak scornfully of the existing county asylum system, or indulge in optimistic expectations and prophecies as to the wonderful cures which will result from separate hospitals for recent and acute cases, to realize these facts. A passage in one of Dr. Major's annual Reports of the Wakefield Asylum enforces the painful truth for which I am now contending. He says: "I am constrained to express my opinion that in the large majority of the unfavourable cases admitted, the unhopeful prospect has been due, not to want of recourse to early treatment, but, so to speak, to inherent unfavourableness determined from the very outset of the mental symptoms. *Experience soon shows how numerous are the cases admitted into any asylum, in which the insanity is given (and so far as can be ascertained correctly given) as being of recent date, and yet in which but little or no hope of recovery can be entertained.*" (Report, 1878, p. 16).*

* I would also mention in this connection some important evidence given at the Select Committee of the House of Commons on Lunatics in 1859 by the Chairman of the Hanwell Asylum Committee (Sir Alexander Spearman), when he was asked: "Is not the effect of keeping patients in an asylum, instead of trans-

Dr. Merson has recently afforded evidence of the increased ratio of cases of general paralysis to the total number of admissions, and he is not alone in his experience. Whether the sum of occurring insanity is greater than formerly or not, there seems to be overwhelming evidence that this hopeless form of mental disorder has increased in frequency in Yorkshire and Lancashire. In his Report of the Hull Asylum, 1888, Dr. Merson says: "To show the hopeless character of many of the admissions I need only mention that more than 26·5 per cent. of the persons admitted were suffering from general paralysis." Again, in this year's annual Report, he observes that of 824 cases admitted 309 were suffering from forms of mental disease, which rendered a cure from the first impossible. Of course these evidences of the hopeless character of a large number of cases of insanity admitted into our county asylums reveal very disagreeable facts, but unless they are candidly admitted and widely stated, the popular, and, I must think, medical illusion is perpetuated, that if only every case of mental disease were immediately placed under treatment, recovery would follow in a very large proportion of instances, some promising us even 80 per cent. The exposure of this fascinating fallacy, at once so pleasant to indulge in, and the cause of such bitter disappointment, does not, however, by any means disprove what has been very properly insisted upon, and by no one more strongly than myself, that prompt and judicious treatment in the early stage of mental disease will prove successful in some cases, which if they remained at home and received no special medical treatment would go from bad to worse, and lapse into a condition of hopeless dementia.

What I have said only affects the amount of the provision which ought to be made for curable cases, many holding that

ferring them to the workhouse, to keep out from your asylum curable cases to which you might do much good?" The reply was in the negative, and he proceeded to state that the Commissioners in Lunacy had communicated to the Committee the fact that there were no less than 76 curable pauper cases in private asylums in Middlesex, and had expressed a wish that immediate arrangements should be made for receiving these curable cases into the Hanwell Asylum. The witness then stated that they undertook to remove into the asylum every case that was really one likely to be benefited by the removal, and by being placed under more careful management. The Asylum Medical Officers visited every one of those cases, and they reported upon them to the Committee. What was the result? Why, to show that out of those 76 patients not more than half were cases in which there was the slightest possible chance of recovery. Four females were transferred to Hanwell, and in regard to these the Chairman's evidence was as follows:—"When I inquired yesterday it appeared that one had died and three were incurable." (Report of Select Committee, April 11, 1859, p. 251.)

the extent of this should be very large, and I holding that it need be only very small.

Annexes for the chronic class of cases have met with the general approval of Superintendents—the amount of land, the staff of attendants, and the outlay on the building being less than in curative establishments. They have been promoted by the Lunacy Commissioners from time to time. In one of their Reports they maintain that "The best mode of making provision for pauper lunatics for which asylums have no accommodation is to erect inexpensive buildings adapted for the residence of idiotic, chronic, and harmless patients in direct connection with, or at a convenient distance from, the existing institutions. These auxiliary asylums would be intermediate between union workhouses and the principal curative asylums. The cost of building need not in general much exceed one-half of that incurred in the erection of ordinary asylums, and the establishment of officers and attendants would be on a small and more economical scale than those required in the principal asylums" (1887). I have the high authority of Mr. Cleaton for stating that the Board has seen no reason to alter the opinion thus expressed in regard to one of the most effectual remedies for the evil of which we are so painfully aware, and are so anxious to mitigate—accumulation.

I would here record, emphatically, my admiration of the county asylums as a whole, for the success of which we are indebted to the Committees of Visitors as well as the Medical Superintendents. Well indeed will it be if their successors in authority equal them in their efficiency. As Dr. Needham has justly said: "The generally admirable condition of asylums has been largely due to the direct or indirect action of the Magistrates, who have been well served by men whom they have trusted." If the liberality we admire has sometimes been marked by lavish prodigality, I do not wish the ratepayers or County Councils to suppose that cheapness is necessarily the one thing to secure, and that anything is good enough for the insane poor. The late Mr. Gaskell, for whom when in his prime all who knew him entertained so deep a respect, and whose name is now permanently associated with an examination for honours in psychological medicine—Mr. Gaskell, more than 40 years ago, thus wisely expressed himself in regard to the danger of extravagance in the erection of pauper asylums:—"It will not, I trust, be imagined that I have any wish to advocate a stinted accommodation for the insane poor of the county (Lancashire). On the contrary, my

ardent desire is to see a liberal amount of that accommodation provided; but, at the same time, I submit that it should be judicious in its character and suited to the conditions of the parties needing it." Golden words, these!

Of the proportion of pauper lunatics for whom provision ought to be made in asylums I should place the minimum at 65 per cent., in that case apportioning 25 per cent. to workhouses, and 10 per cent. to outdoor relief, which is probably too high; while I think the maximum proportion of asylum cases may be estimated at about 70 per cent. In Yorkshire it has reached 71 per cent.

In conclusion, I would summarize my conclusions as follows:—

1. That the resources offered by the system of boarding-out patients with strangers are, as regards this county, of a very restricted character, and, therefore, any sanguine hopes excited by what has been effected in Scotland by this plan will not be fulfilled. The practice of paying something to the friends of pauper patients towards their maintenance to a more liberal extent than is at present the case should be encouraged. That after all has been done that can properly be done in the way of out-door relief, the great mass of pauper lunacy remains a fearful tax on asylum accommodation.

2. That workhouses, under proper conditions, including separate lunatic wards and effectual supervision, should be used to the greatest possible extent for that hopeless and chronic class of cases, which experience has shown may be cared for with sufficient regard to their comfort and interests.

3. That the Capitation Grant should, if retained, be re-adjusted, so as to avoid offering a temptation to guardians to send chronic cases to asylums.

4. That after provision has been made in workhouses and in private dwellings the great majority of the insane poor, probably 65 per cent., must be provided for in county and borough asylums.

5. That either distinct blocks should be prepared as hospitals for presumably curable cases, or a separate hospital for this class at some distance from the asylum.

STATISTICAL TABLES

SHOWING THE PAST AND PRESENT PROVISION FOR THE INSANE POOR IN YORKSHIRE.

TABLE I.—Summary of Pauper Lunatics in Yorkshire, Jan. 1, 1889.

Opened.	Asylum.	Number.
1777	York Lunatic Asylum	46
1818	Wakefield (W.R.)	1350
1847	York (N.R.)	573
1849*	Hull Borough	276
1871	Beverley (E.R.)	259
1872	Wadsley (W.R.)	1562
1888	Menston (W.R.)	167
	In Workhouses	1316
	With Friends and Elsewhere	330
	Total	5879†

* Year in which the asylum was purchased by the Borough. The new asylum was opened in 1883.

† The number in the Report of the Commissioners in Lunacy 1889 (Table IX., p. 32), derived from the returns made by Clerks of the Guardians of Unions and Parishes of England and Wales, is 5,911, including cases paid for by the county, on account of the parish being undetermined. There are no pauper patients in the Private Asylums of Yorkshire.

Table II.—Showing the Admissions, Discharges, and Deaths from the opening of the West Riding Asylums (Wakefield, Wadsley, and Menston), the North Riding, East Riding, and Hull Borough Asylums, to the 1st January, 1889.

	M.	F.	Total.	M.	F.	Total.
Cases Admitted				18,272	18,605	36,877
Cases Discharged—						
Recovered	6,498	8,137	14,635 (39·69 p.c.)			
Relieved	1,689	1,800	3,489			
Not Improved	1,059	1,012	2,071*			
Died	7,010	5,330	12,340			
Total Cases discharged and died since opening of the Asylums				16,256	16,279	32,535
Remaining 1st January, 1889				2,016	2,326	†4,342

* Includes Transfers to other Asylums. In the Wakefield Asylum Annual Reports, the "not improved" cases are included under the "relieved" up to the year 1850, and Transfers are not given until 1873.

† This total includes a few private and out-county patients.

TABLE III.—Showing the total Admissions into the County and Borough Asylums of Yorkshire, distinguishing the Asylums from their opening to the 31st December, 1888, with the total number of Recoveries, and the percentage thereof, calculated on the Admissions, with and without Transfers.

Asylum.	Period.	Admissions.		Recoveries.		Percentage of Recoveries on Admissions.	
		Including Transfers. (1818-88)	Excluding Transfers. (1847-88)	1818-88.	1847-88.	Including Transfers.	Excluding Transfers.
West Riding Asylum (Wakefield)	1818 to 1888	20,294	—	8,585	—	42·30	—
Do. Do.	1873 to 1888	—	7,613	—	3,227	—	42·39
West Riding Asylum (Wadsley)	1872 to 1888	7,430	6,411	2,671	2,671	35·95	41·66
West Riding Asylum (Menston)	Oct. 8, 1888, to Dec. 31, 1888	167	—	—	—	—	—
North Riding Asylum (Clifton near York)	1847 to 1888	5,296	4,786	2,096	2,096	39·58	43·79
East Riding Asylum (Beverley)	1871 to 1888	1,382	1,063	407	407	29·45	38·28
Hull Borough Asylum	1849 to 1888	2,308	2,266	876	876	37·96	38·61
Totals		36,877	22,139	14,635	9,277	39·69	41·90
County and Borough Asylums in England and Wales	1879 to 1888						40·13
	Do.					35·60	

Table IV.—Showing the Recoveries of *Persons* calculated on the *Persons* Admitted into the Hull Borough, East Riding and West Riding (Wadsley) Asylums, from their opening to January 1st, 1889.*

History of Recoveries of Persons.	M.	F.	Total.	The same, excluding Transfers.		
				M.	F.	Total.
Persons Admitted†	4,653	5,006	9,659	4,018	4,298	8,316
Of whom were Discharged Recovered during the same period, being 35·14 per cent. of Persons Admitted ...	1,431	1,953	3,384	1,418	1,943 (40·42)	3,360
Of these Recovered Persons there were Re-admitted Relapsed	297	459	756	295	459	754
Leaving Recovered Persons who have not Relapsed	1,134	1,494	2,628	1,123	1,484	2,607
Relapsed Persons Discharged Recovered	167	242	409	167	242	409
Net Recovered Persons, being 31·44 per cent. of Persons Admitted	1,301	1,736	3,037	1,290	1,726 (36·27)	3,016

P.S.—The materials for this Table cannot be obtained from the Annual Reports of the Wakefield, North Riding, and Menston Asylums.

* 1. Hull Asylum during 39½ years (1849-88).

2. East Riding Asylum, 17 years (1871-88).

3. West Riding Asylum (Wadsley), 16 years and 127 days (1872-88).

† The number of *Cases* admitted into these Asylums during the same period amounted to 11,120, and the Recoveries of *Cases* to 3,954, or 35·55 per cent., as against 31·44 per cent. when the calculation is made on *Persons*, as in the Table.

TABLE V.—Showing the Admissions, Discharges, and Deaths in the Yorkshire County and Borough Asylums, with the Mean Annual Mortality and Proportion of Recoveries per cent. since the opening of the Asylums to December 31st, 1888.

Year (Dec. 31).	Admitted.	Discharged.			Died.	Remaining 31st December in each year.	Average Numbers Resident.	Percentage of Recoveries on Admission (including Transfers).	Percentage of Deaths on Average Number Resident.
		Recovered.	Relieved.	Not Improved.					
*1818 to 1867	13,556	5,465	1,002	345	4,900	1,844	721	40·31	13·87
1868	710	315	28	24	180	2,007	1,897	44·36	9·48
1869	710	298	24	15	247	2,133	1,989	41·97	12·46
1870	646	315	18	9	244	2,193	2,164	48·76	11·27
1871	855	298	84	139	263	2,264	2,392	34·85	10·99
1872	1,119	308	59	293	247	2,476	2,505	27·52	9·85
1873	968	338	49	109	321	2,627	2,563	34·91	12·52
1874	1,102	436	49	121	321	2,802	2,722	39·56	11·79
1875	1,162	471	52	86	368	2,987	2,882	40·53	12·76
1876	1,156	539	96	94	334	3,080	3,068	46·62	10·88
1877	1,120	464	137	60	369	3,170	3,121	41·42	11·72
1878	1,174	464	209	75	347	3,249	3,231	39·52	10·73
1879	1,206	533	149	85	370	3,318	3,316	44·19	11·10
1880	1,219	470	192	37	355	3,483	3,427	38·55	13.27
1881	1,238	501	175	32	396	3,617	3,601	40·46	10·99
1882	1,227	495	173	108	370	3,698	3,662	40·34	10·10
1883	1,237	486	183	39	395	3,832	3,778	39·28	10·45
1884	1,335	490	215	47	449	3,966	3,939	36·70	11·39
1885	1,132	482	139	48	484	3,945	3,941	42·50	12·28
1886	1,281	505	150	39	444	4,088	4,010	39·42	11·07
1887	1,282	492	129	69	487	4,193	4,131	38·37	11·37
1888	1,442	470	177	197	449	4,342	4,222	32·59	10·64
	36,877	14,635	3,489	2,071	12,340		1,455	39·69	12·09

* As there were no Discharges or Deaths during the short period the West Riding Asylum was opened in 1818, that year has been omitted from the calculations; the number of years up to 1867 has been reckoned as 49, and the number of years up to 1888 (inclusive) being reckoned as 70.

Table VI.—Showing the Mortality Rate of the County and Borough Asylums of Yorkshire from their opening to 1887 (inclusive), in decennial periods, calculated on the average number resident.

I. WEST RIDING ASYLUM, WAKEFIELD.

Period.	Deaths (Average Annual Number).	Average Annual Number Resident.	Deaths per cent.
*1819-28	30·9	192·8	16·02
1829-38	52·9	292·7	18·07
1839-48	51·0	421·5	12·00
1849-58	121·4	711·2	17·06
1859-68	155·7	1069·7	14·55
1869-78	154·2	1428·4	10·79
1879-87 (9 years)	146·4	1405·5	11·56
1819-87 (69 years)	103·2	780	13·20

II. NORTH RIDING ASYLUM, NEAR YORK.

Period.	Deaths (Average Annual Number).	Average Annual Number Resident.	Deaths per cent.
1848-57	21·6	264·7	8·16
1858-67	46·4	479·4	9·67
1868-77	49·0	488·7	10·03
1878-87	59·9	557·1	10·75
1848-87	40·0	447·4	9·60

III. HULL BOROUGH ASYLUM.

Period.	Deaths (Average Annual Number).	Average Annual Number Resident.	Deaths per cent.
†1849-70			
1871-80	26·1	145·9	17·88
1881-87 (7 years)	29·8	210·1	14·18
1871-87 (17 years)	27·64	172·3	16·01

IV. WEST RIDING ASYLUM, WADSLEY.

Period.	Deaths (Average Annual Number).	Average Annual Number Resident.	Deaths per cent.
‡1873-82	105·3	897·9	11·80
1883-87 (5 years)	154·4	1488·6	10·37
1873-87 (15 years)	121·7	1095·5	11·11

V. EAST RIDING ASYLUM, BEVERLEY.

Period.	Deaths (Average Annual Number).	Average Annual Number Resident.	Deaths per cent.
1872-81	27·30	220·48	12·37
1882-87 (6 years)	29·00	279·24	10·39
1872-87 (16 years)	27·93	256·25	10·90
England and Wales 1878-87 (County and Boro' Asylums).	...	...	9·99

* The Asylum was opened in 1818, but not long enough to comprise any deaths.

† The Mortality Returns for 1849-70 are doubtfully correct, and therefore have been omitted.

‡ The year of opening (1872) comprising only four months is excluded.

TABLE VII.—Showing the Recovery Rate in the County and Borough Asylums of Yorkshire, from their opening to 1887 inclusive, in decennial periods, calculated on the total Admissions (including Transfers).*

I. WEST RIDING ASYLUM, WAKEFIELD.

Period.	Admissions.	Recoveries.	Percentages.
†1819-28	1,124	508	45·10
1829-38	1,430	607	42·44
1839-48	1,474	563	38·19
1849-58	2,991	1,285	42·96
1859-68	3,919	1,591	40·59
1869-78	4,842	2,239	46·24
1879-87 (9 years)	4,030	1,641	40·71
1819-87	19,810	8,434	42·57

II. NORTH RIDING ASYLUM, NEAR YORK.

Period.	Admissions.	Recoveries.	Percentages.
†1848-57	895	272	30·39
1858-67	1,244	521	41·88
1868-77	1,423	577	40·54
1878-87	1,453	639	43·97
1848-87	5,015	2,029	40·46

III. HULL BOROUGH ASYLUM.

Period.	Admissions.	Recoveries.	Percentages.
1849-70	969	395	40·8
1871-80	651	275	42·44
1881-87 (7 years)	579	172	29·69‡
1849-87	2,199	842	38·29

IV. WEST RIDING ASYLUM, WADSLEY.

Period.	Admissions.	Recoveries.	Percentages.
†1873-82	4,083	1,436	35·17
1883-87 (5 years)	2,525	1,014	40·15
1873-87	1,608	2,450	37·08

V. EAST RIDING ASYLUM, BEVERLEY.

Period.	Admissions.	Recoveries.	Percentages.
†1872-81	708	244	34·46
1882-87 (6 years)	408	145	35·53
1872-87	1,116	389	34·85

* In comparing Decennial periods it would obviously be unfair to include the first year in which an asylum was opened. This year has, therefore, been omitted in this Table, with the exception of the Hull Asylum, which was re-christened in 1849, but was not a new asylum.

As the Recovery Rates in this Table are exclusive of the year of opening, while those given in Table III are inclusive of that year, there is a discrepancy to that extent between them. This Table, which gives the most favourable results, is fairer to the Asylums than the other.

‡ The low Recovery rate is due to a large number of Transfers from the East Riding Asylum, and the unfavourable character of many of the Admissions.

Table VIII.—Showing the Admissions of Pauper Lunatics into the County and Borough Asylums in Yorkshire (including Re-Admissions and Transfers) during the years 1849-1868 inclusive.

Years.	Total Admissions.	Years.	Total Admissions.
1849	397	1859	508
1850	346	1860	510
1851	444	1861	574
1852	399	1862	531
1853	449	1863	528
1854	436	1864	590
1855	369	1865	531
1856	423	1866	562
1857	525	1867	639
1858	501	1868	709

TABLE IX.—Showing First Admissions of Pauper Lunatics into the County and Borough Asylums in Yorkshire during the Decades 1868-77, 1878-87; also the Annual Average during each decade.

Years.	Ratio of First Admissions to Pop. (per 10,000).	First Admissions.			
		Including Transfers.		Excluding Transfers.	
1868	2·60	590		2·55	583	
1869	2·56	595		2·53	588	
1870	2·29	542		2·27	537	
*1871	2·28	550		1·42	342	
†1872	3·47	868	Annual Average = 740	2·78	696	Annual Average = 650
1873	2·67	665		2·16	537	
1874	3·31	836		2·80	709	
1875	3·58	926		3·19	825	
1876	3·52	942		3·18	851	
1877	3·28	892		3·05	832	
1878	3·23	894		2·43	773	
1879	3·38	952		3·09	869	
1880	3·31	947		3·02	865	
1881	3·43	998		3·34	971	
1882	3·20	948	Annual Average = 958	3·13	927	Annual Average = 902
1883	3·24	974		3·11	935	
‡1884	3·31	1020		3·06	935	
1885	2·83	881		2·74	853	
1886	3·15	966		2·86	911	
1887	3·14	1009		3·07	984	

* Opening of the East Riding Asylum.
† Opening of the Wadsley Asylum.
‡ Immediately after the opening of the new Hull Borough Asylum.

Table X.—Showing the Ratio of Pauper Lunatics to the Population and to the Number of Paupers in various Counties, including Yorkshire, January 1st, 1888.

County.	Ratio of Pauper Lunatics to Population.	Ratio of Paupers to Population (per cent).	Ratio of Pauper Lunatics to Paupers (per cent).
Middlesex	1 in 261	2·70	14·21
Wilts	1 in 271	4·32	8·42
Gloucester	1 in 284	3·77	9·34
Kent	1 in 378	3·20	8·27
Norfolk	1 in 319	4·53	6·92
Southampton	1 in 323	3·65	8·49
Somerset	1 in 338	4·21	7·02
Warwick	1 in 338	2·40	12·30
Devon	1 in 339	4·31	7·02
Surrey	1 in 346	2·55	11·36
Sussex	1 in 403	3·62	6·84
Essex	1 in 428	3·46	6·74
Notts	1 in 430	2·50	9·28
Lancashire	1 in 456	1·98	11·07
Cheshire	1 in 474	2·37	8·88
Stafford	1 in 487	3·52	5·84
Yorkshire	1 in 560	2·32	7·54
Durham	1 in 668	2·34	6·38
England & Wales...	1 in 384	2·90	8·92

TABLE XI.—Showing the Number and Distribution of Pauper Lunatics and Idiots in Yorkshire in 1837 in pursuance of an Address to the Crown July 5th, 1836. (First Return made by the Poor Law Commissioners.)

RIDING.	In Asylums.	In Licensed Houses.	In Work-houses and Out-door.	Totals.
East Riding	23	71	92	186
North Riding	36	14	126	176
West Riding	305*	3	376	684
Totals	364	88	594	1,046 { 1 in 1,417 Pop.
England and Wales (at same date)	—	—	—	13,667 { 1 in 1,000 Pop.

* At that time there were in the Wakefield Asylum about 300 patients.

NOTE.—In Middlesex there was in the same year 1 to 696; in Lancashire 1 to 1,960; in Wilts 1 to 750; and in Surrey (lowest proportion in England) 1 to 1,965.

(Corresponding Return, January 1st, 1889.)

RIDING.	In Asylums.	In Licensed Houses.	In Work-houses and Out-door.	Totals.
East Riding	574	—	207	781
North Riding	552	—	142	694
West Riding	3,139	—	1,297	4,436
Totals	4,256	—	1,646	5,911 1 in 560 †

† In 1888, 1 in 570. At the same date there were in the East Riding 1 in 475, in the North Riding 1 in 555, and in the West Riding 1 in 573.

Table XII.—Showing the number of Pauper Lunatics maintained in County Asylums, Registered Hospitals, Private Asylums, Workhouses of Yorkshire, and those residing with Relatives or elsewhere, Jan. 1st, 1861, 1871, 1881, 1888, and 1889. Also the number per cent. under these headings.

Years.	Pauper Lunatics.				Of each 100 Pauper Lunatics the number maintained.			
	In Asylums.	In Work-houses.	With Relatives, etc.	Total.	In Asylums.	In Work-houses.	With Relatives, etc.	Total.
1861	1571	697	379	2647	59·40	26·30	14·30	100·0
1871	2191	1064	407	3662	59·83	29·05	11·12	100·0
1881	3381	1274	302	4957	68·20	25·70	6·10	100·0
1888	4159	1297	325	5781	71·94	22·44	5·62	100·0
1889	4265	1316	330	5911*	72·16	22·26	5·58	100·0
England & Wales.								
1889	52193	17509†	5930	75632	69·01	23·15	7·84	100·0

* See note, Table I.

† Includes the Metropolitan District Asylums. If these were deducted and added to the "Asylums" the percentages would be as follows :—In Asylums, 76·27; in Workhouses, 15·89.

TABLE XIII.*—Showing Date of Opening, Number of Patients, Expenditure, etc., in Yorkshire County and Borough Asylums, to Jan. 1, 1887.

YORKSHIRE.	Date of Opening.	Population of District, 1881.	Amount of Land.	Amount of Land Rented.	Total Amount of Land.	Cost of Land to December 31st, 1886.	Expense of Building to December 31, 1886.	Total.
			A. R. P.	A. R. P.	A. R. P.	£	£	£
†North Riding, near York.....	April 7, 1847	315,756	158 0 0	— — —	158 0 0	22,542	109,423	131,965
West Riding, Wakefield	Nov., 1818	2,175,314	49 2 22	78 1 24	128 0 6	11,397	345,627	357,025
West Riding, Wadsley	Aug. 27, 1872		194 3 28	— — —	194 3 28	30,253	337,151	367,404
‡East Riding, Beverley	Oct. 25, 1871	111,690	113 3 19	— — —	113 3 19	5,798	57,825	63,623
Hull Borough (New Asylum)	Dec. 13, 1883	154,240	74 2 0	— — —	74 2 0	12,770	79,249	92,019
		2,757,000	590 3 29	78 1 24	669 1 13	82,760	929,275	1,012,035

* Extracted from the latest Parliamentary Return (1887). † Excluding Borough of Scarborough. ‡ Excluding Hull and York Boroughs.

Table XIII. (*Continued.*)

YORKSHIRE.	Number of Patients. Accommodation, December 31, 1886.			Number of Patients in Asylum, January 1st, 1887. Belonging to the District.			Belonging to other Districts.			Cost of Maintenance per head during 1886. Annual.			Weekly.			Expense of Medical Staff. Officers.	Salaries.	Allowances.
	M.	F.	T.	M.	F.	T.	M.	F.	T.	£	s.	d.	£	s.	d.		£	
North Riding, Near York...	309	321	630	236	247	483	52	54	106	24	6	10	9	4		Supt.	800	Furnished House, Man-servant, Coals, Gas, Washing, Stabling, etc., £287.
																Asst. Med. Off.	170	Rations, Attendance, Furnished Apartmts., Coals, Lighting and Washing, £126.
West Riding, Wakefield ...	695	703	1,398	693	704	1,397	1	—	1	22	8	10	8	7		Supt.	600	Board, Furnished House, three Servants, £420.
																1st A. M. O.	200	Board, Furnished Rooms, Attendance, £90.
																2nd A. M. O.	150	Ditto, ditto.
																3rd A. M. O.	130	Ditto, ditto.
West Riding, Wadsley.....	708	844	1,552	660	789	1,449	23	71	94	20	18	2	8	0		Supt.	800	Residence, Board, etc., £100.
																Senior Asst.	250	Ditto, ditto, £75.
																2nd Asst.	180	Ditto, ditto.
																3rd Asst.	120	Ditto, ditto.
																4th Asst.	120	Ditto, ditto.
East Riding Beverley.....	150	150	300	109	122	231	44	17	61	22	3	0	8	6		Supt.	500	Furnished House, Horse Keep, Washing, Coals, Gas, Garden Produce, £160.
																Asst. M. O.	100	Board, Lodgings, Washing, and Attendance.
Hull Borough	130	180	360	128	124	252	—	2	2	27	9	9	10	7		Supt.	400	Furnished House, Board, Washing, Coal, Gas, use of Garden, and Keep of Horse, £350.
																A. M O.	120	Board, Lodging, Washing and Attendance, £70.
	2,012	2,198	4,240	1,826	1,986	3,812	120	144	264	117	6	7	2	5	0			

Remarks on the Urine and Temperature in General Paralysis of the Insane. By JOHN TURNER, M.B., Assistant Medical Officer, County Asylum, Brentwood, Essex.

The following pages contain the account of some analyses of the urine in general paralysis, together with observations on the temperature in this disease in relation to the nitrogenous excretion.

The testimony they bear is necessarily fragmentary, for just at the period when the greatest departure from the healthy standard occurs one can only obtain the urine for the 24 hours in rare cases and by chance.

The total quantity of urine voided in 24 hours is given, expressed in cubic centimetres in Table I.; it varies from 625 to 2,669 cc. Landois and Sterling give the normal amount as varying from 1,000 to 1,500 cc. A reference to the table will show that in the majority the amount was above the higher limit in my cases, which would indicate that if there was any error in the collection it was not due to loss; and if too much was in some cases collected, that is for more than 24 hours, it would only strengthen the position that I take. Every precaution was observed in the collection, the patients being made to micturate at the beginning of the time of collection, and careful watch was taken that they did not pass any during this period, except into the vessel set apart. They were kept indoors, and before going to stool were made to empty their bladders.

Albumen was absent from all but a few, and in these existed in the merest traces, and only during certain times of the day.

The phosphoric acid was determined volumetrically by uranium nitrate, using the ferrocyanide of potassium as an indicator. The earthy phosphates were collected by precipitation with ammonia, washed; dissolved in acetic acid, and the amount of P_2O_5 in combination with them deducted from the total P_2O_5, the remainder giving the P_2O_5 in combination with the alkalies.

"Pathologically, phosphoric acid is found in excess along with excess of urea, when it is probably due to increased tissue metabolism generally, and in excess without excess of urea when probably only the nervous system is involved" (Ralf). In Parke's experiments on two healthy men, taking the mean from 26 analyses in one case and 29 in the other,

the proportion of phosphoric acid to urea was as 1 to 15·6, ranging between 1 : 20 and 1 : 12·6 in the first case; and in the second as 1 to 16, ranging between 1 to 23·5 and 1 : 14·2. Roughly speaking, it should be as 1 : 14.

The amount passed in health during 24 hours varies from 2·5 to 3·5 grammes, of which 1·66 to 2·33 are in combination with alkaline oxides (potash and soda), and 0·84 to 1·17 in combination with the earths (lime and magnesia).

In 40 analyses (see Table I.) the phosphoric acid only twice reached beyond the lower limit of the healthy range, 2·5 grammes. Both instances were in the case of E. P. (No. 27 and 28), and during a congestive seizure. No. 27 only represents the excretion for nine hours, and here the increase in phosphoric acid is in proportion to the increase in the urea excreted, and may therefore be due to increased tissue metabolism generally; but during the progression of the seizure the proportion rises considerably, viz., as 1 : 10.

To whatever cause this may be due, it is undoubtedly the fact that there is excitation of some part or parts of the brain (probably cerebrum) during these seizures; this must mean more waste-products to be got rid of, and therefore the rise in the amount of phosphoric acid, occurring as it does just after the subsidence of the most active symptoms, is probably due to cerebral changes.* In this man's case, both before and after the seizure (which occurred on the 9th), when the phosphoric acid was determined, it was considerably below the normal amount, in fact, seven days after the onset of the seizure, it fell to 0·5 grammes in 24 hours—the patient having now been for several days in a semi-unconscious dazed condition, with right sided paralysis, right anæsthesia of arms, and aphasia—a condition representing probably lessened excitation of the cerebrum, or at least non-excitation of some parts. In G. C. D.'s case there was intense irritability of temper and almost continual mental excitement, lasting for many months, along with jerking of the limbs, especially the arms, so much so that the attempt to perform any purposive action would cause them to be jerked violently about, rendering the efforts quite futile; and when sitting quietly a touch on the arm would set both violently jerking, and some days when more than ordinarily excited and irritable, there would be ceaseless twitchings of the arms and head all the day, yet with both

* For Mendel's remarks on the excretion of P_2O_5 in *healthy conditions*, see p. 344.

this mental excitement and increased motor activity, the excretion of phosphoric acid was below the normal on every occasion that it was determined (see Table I.). This may, perhaps, be accounted for on the supposition that a considerable portion of the nervous tissue being destroyed during the prolonged course of the disease (about two years) fewer nerve cells remained active, and hence less waste, supposing the remaining portion to be acting normally. But with increased action we get a series of figures falling not far short of the normal amount, viz., 1·4—2—2—and 1·96 grammes. And we find that except in the first instance the proportion of phosphoric acid to urea is low, being 1 : 10, 1 : 11, and 1 : 12.

With regard to the alkaline and earthy phosphates, the former as a rule show no great departure from the healthy standard, but the latter are in the great majority of cases considerably diminished. Wood's observations showed that mental activity slightly increased the alkaline phosphates, but that it caused a greater and decided diminution of the earthy phosphates, from which Mendel concludes that nerve tissue increases like muscular tissue during mental work, thereby entailing a diminution in quantity of the phosphates excreted (Meynert's "Psychiatry," translated by Sach, p. 242). If this be so, then the lessened excretion of phosphoric acid, and more especially of earthy phosphates, would indicate greatly increased cerebral activity in those parts of the brain left unimpaired by disease (increase of connective tissue, destruction of nerve cells, etc., found in brains of general paralytics)—a condition of things which is most probably the case, *e.g.*, delusions of exaltation, exaggeration of ideas, etc., etc.

It is unsafe to draw any conclusion from a single case, but if Mendel's theory applies to nervous activity in pathological states it is distinctly opposed to the facts in the case of E. P. This man, as before stated, had a seizure on the 9th in the afternoon, and during the night was exceedingly restless. On the 11th the phosphoric acid for nine hours equalled 2·46 grms.; on the 12th it was 4 grammes for 24 hours. With this increase, however, there was no marked alteration in the phosphoric acid in combination with the earths (0·86 grms.). The alkaline phosphates were of course markedly increased. On the 17th, after the subsidence of the active symptoms, the phosphoric acid fell to 0·5 grammes in 24 hours.

The few observations that I have made in cases of chronic and active mania also show a diminished or normal amount of phosphoric acid excreted in the urine, and in these cases the earthy phosphates were very decidedly lessened.

Dr. Savage, in his work on Insanity, remarks that he has "found excess of phosphates and abundant urea in the urine of general paralytics." This does occur occasionally, but it is certainly very exceptional, and Bucknill and Tuke in their "Psychological Medicine," state that the late Dr. Sutherland found from his analyses that "In general paralysis there was great deficiency of the phosphates, falling as the disease advanced from 4·4 to 1·57."

Urea.—The urea was estimated by the sodium hypobromite process, and the necessary correction for temperature being made, this method yielded remarkably good results when tested with solutions of urea of known strength. Urea is, in a state of health, excreted at the rate of 30 to 40 grammes in 24 hours. Diet influences the amount largely in health, and exercise perhaps slightly. I may remark that all the cases referred to in this paper had a similar diet, except that in some of the more feeble ones this was supplemented by milk, eggs, and other nitrogenous compounds, but without bringing the excretion of nitrogen up to the normal amount. The ordinary asylum diet contains, roughly speaking, about

250 grains (16·2 grammes) Nitrogen.
5,331 „ Carbon.

This compares fairly favourably with the table given in Parkes' "Practical Hygiene." He says, "The usual range is from 250 to 350 grains of nitrogen for adult men."

Vogel and Neubauer state that a diminished quantity of urea may depend on a diminution of protein metamorphoses, or to a retention of urea in the body as in uræmia and dropsy. If this latter condition is to explain entirely the reason of the diminished excretion of urea which is found in general paralysis we should expect more often, I think, to find morbid changes in the liver, kidneys, etc., whereas as a rule these organs are found in a fairly healthy condition, and dropsy, from whatever cause, is not often met with.

In the last column of Table I. the stage of the disease when the analysis of the urine was made, is stated. I have reckoned three stages, the first continuing until the first

seizure, and the second until the disease has progressed to such an extent that the power over the sphincters is lost.

Twenty-seven different cases of general paralysis were examined at various periods. In all 65 analyses of urine were made, of which fourteen were from cases in the first stage, forty-two in the second, and nine in the third.

In eight out of ten general paralytics in the first stage the urea was below the lowest limit of the normal amount, *i.e.*, below 30 grammes, and in the other two cases it was respectively 31 and 32·7 grammes. In 10 out of 14 in the second stage the urea was below 30, and in the remaining four it just reached 30 grammes.

In four out of six general paralytics in the third stage the urea was below, and in two it was slightly above 30 grammes.

Thus out of 26 general paralytics, four of whose urine was examined in different stages of the disease, bring the number up to 30; in 22 cases the urea was below the normal, and in eight it just reached the lower limit (30 grammes) of the normal amount. In the total number of analyses, excluding four which represented less than 24 hours' excretion, it was found that in

17	instances	the	urea	was below	20 grammes
17	,,	,,	,,	25	,,
14	,,	,,	,,	30	,,
11	,,	,,	,,	35	,,
2	,,	,,	above	40	,,

or in other words, in 48 instances it was diminished, in 11 it was normal, and in two increased. Of these two instances one was an acute case with rapid emaciation, great excitement, and speedy death; and the other was from the urine taken during the height of a seizure (E. P.'s case). A reference to Table III. will show that practically the whole of the nitrogen excreted is given off in the form of urea. The nitrogen from soda lime was only estimated in 19 cases. It will be observed that generally the nitrogen from soda lime is below that calculated from the urea. Parkes and Voit both found this to be the case occasionally. The explanation which Parkes gives (in reference, however, to the mercuric nitrate process) may apply here. He says: "Possibly some of the non-ureal substances thrown down by mercuric nitrate (which give off their nitrogen with hypobromite) may contain less nitrogen than urea, and the calculation is therefore incorrect; also, as there is some difficulty in

getting off the last traces of ammonia in the soda lime, this may be understated slightly." To sum up, so far as these analyses go, they tend to show that there is in all the stages of general paralysis a decided diminution in the quantity of urea daily excreted. Whether this decrease is a peculiarity of the disease, or is due to the lessened amount of nitrogen in the asylum dietary, I cannot say. As before stated, 250 grains of nitrogen represent roughly the daily amount in the ordinary diet. This is the lowest limit given by Parkes for a diet suitable for healthy adults, but as we find the diminution of urea continuing and even increasing in the second and third stages, when often the patient's appetite is enormous and highly nitrogenous extra articles of food are being taken, this diminution would appear to be more probably a peculiarity of the disease.

Furthermore, practically, the whole of the nitrogen excreted by the kidneys is given off in the form of urea.

The Temperature.—The fact that frequently in general paralysis, apart altogether from any inflammatory disorders of the body, there is an increase of the temperature is universally recognized. Dr. Mickle made a number of observations, and his results show this to be the case, also that frequently there was a rise in the evening, and that "an absolutely high temperature occurs in cases rapidly progressing towards death." Dr. Savage states: "My experience is that in general paralysis in the earlier stages there is very little, if any, increase in the temperature, except in acute cases. About the period of the onset of fits there is a tendency to irregular increases; before, during, and after fits the temperature may be high. Between the fits the temperature may be normal, it varies irregularly. In the latter part of the disease, if uncomplicated, the temperature of morning is about 100°, and of the evening 101° to 102°." In a series of temperature observations made by Crichton Browne on insane patients he found that in general paralysis the highest mean temperature was obtained.

Admitting that a heightened temperature is the rule, still there are a considerable number of cases in which the temperature is low, sub-normal even, after several weeks' continuous observations. These cases are frequently the placid, apathetic general paralytics, those who do not obtrude their exaggerated ideas and exalted delusions on the observer, even if they are possessed of them. But whether the temperature is above or below the normal there is a

feature which is common to both the classes, and that is irregularity. Remarkable risings and fallings from day to day, or from morning to evening, for some days the thermometer may register only slight variations between the morning and evening readings, then suddenly we get a rise or fall of two or even more degrees without obvious cause. Sometimes a fluctuation, generally a rise, will accompany some mental excitement (visit of a wife, etc.), but as often as not this has no effect on the temperature. The so-called congestive seizures are almost always accompanied by profound alterations in the temperature; it may either be raised, or lowered, more frequently the former. The temperature of T. H., p. 349, represents a case where there was most surprising lowering of the temperature during a seizure.

This frequent occurrence of high temperature has had great stress laid on it by the exponents of the inflammatory theory of this disease. Dr. Blandford remarks (p. 302, Second Edition): "Another indication of an inflammatory disorder is the temperature, which is higher than the normal." Then, quoting from Dr. James Crichton Browne, "West Riding Asylum Reports," vi., p. 191, he goes on: "There is in general paralysis just that rise of temperature which we should expect in a chronic inflammatory process in the cortex just at those stages and epochs in the disease when the inflammatory action may be supposed to be most active."

I have taken the temperature in the rectum in a great number of cases, and have generally found that in the first stage there is very little, if any, increase, and it is fairly regular. In the second and third stages, beyond being heightened, it becomes unstable and disturbed by slight causes (in fact, in this respect assumes somewhat the type of temperature which obtains in children), indicating rather a want of regulation than the existence of any inflammatory process.

Dr. MacAlister, in his "Croonian Lectures on Fever," shows the large part which the nervous system plays in the production of increased heat in the body. His theory enables us, I think, to much more satisfactorily account for the remarkable changes met with in the temperature of general paralytics; it accounts equally well for both types met with —the high and the low—which the inflammatory theory fails to do. For, as Dr. MacAlister points out, that though there

may be fever without rise of surface temperature, yet there must be an increase in the amount of heat shown by the increased metabolism, resulting in increase of nitrogenous excretions—a condition of affairs which does not obtain in those general paralytics with a low temperature. In these cases I have never found any increase in the nitrogen excreted; and thus the fact that there is a large class of cases with a temperature generally below normal, but which after death exhibit the same morbid characters, viz., thickening and opacity of the membranes, and adhesions of these to the cortex, is distinctly opposed to the inflammatory theory. The essential characteristic (*i.e.*, instability) of the type of temperature in general paralysis is equally well shown in these cases.

For example is appended the rectal temperature of a general paralytic—T. H.—admitted into the asylum in January, 1887.

Jany. 3rd	Morn. 96·5	Even. 96·4
„ 4th	„ 97·2	„ 97·3
„ 5th	„ 97·4	„ 99·2
„ 6th	„ 98·4	—
„ 7th	„ 97·8	„ 98·2
„ 8th	„ 98·0	„ 98·2
„ 10th	„ 98·0	„ 97·6
„ 11th	„ 97·2	—
„ 12th	„ 98·0	„ 100·0
„ 13th	„ 96·4	—
„ 14th	„ 96·2	„ 97·6
„ 15th	„ 96·1	—
„ 17th	„ 95·0	„ 95·0
„ 18th	„ 91·4	„ 91·4
„ 19th	„ 94·4	„ 95·0
„ 20th	„ 93·8	—
„ 21st	„ 92·0	„ 91·6
„ 22nd	„ 92·4	

On the 23rd he had a seizure at 7 a.m., arms twitching, eyes both turned to the left and upwards, and head also turned to the left, resists attempts to open his eyelids. Body cold. The mercury in thermometer would not in the rectum rise to 90° F. At 3 p.m. the temperature was taken in the rectum with a special thermometer and registered ·87° F. Knee-jerks were well marked, eyes as before. Conjunctivæ insensitive to touching. Grinding his teeth. He died at 4.15 a.m. on the 24th January, 1887.

At the post-mortem examination there was found much thickening and opacity of the membranes, especially over the motor regions, much sub-arachnoid fluid, indicating atrophy of brain. The membranes were not adherent. The lateral and fourth ventricles were granular on their surface. In fact, most of the characteristics which accompany a typical case of general paralysis were found.

Dr. MacAlister considers fever to consist essentially of increased *production* of heat, or, in other words, increased metabolism of nitrogenous tissues. There are three mechanisms in the central nervous system which affect the temperature. The lowest of these, from an evolutionary point of view—which exists in the lower animals as well as men — he styles the Thermolytic or heat-discharging mechanism. This corresponds roughly to the vaso-motor nervous apparatus, and that which controls the respiratory functions. Next in order is the Thermogenic or *heat-producing* centre. From the experiments of Aronsohn and Sachs this would seem to be situated to the inner side of the corpus striatum, near the nodus cursorius of Nothnagel. Stimulation of this region produces rise of temperature, and an increase of something like 25 per cent. in the excretion of nitrogen for 24 hours. The highest, and therefore the latest evolved, least organized and most unstable of all the mechanisms he terms the "Thermotaxic," or *adjusting centre,* destruction of which produces "strange risings and fallings of temperature as the independent variations of production and loss are concurrent, or the reverse." This centre is supposed not to be developed in childhood, and hence the extremely unstable temperature at this period.

Pyrexia, or true fever, is, according to Dr. MacAlister, the result of a disturbance of both the first and second of these mechanisms, thereby producing an increase in the *amount* of heat, and not as in destruction of the first only—a loss of balance of heat—in which case, although the temperature of the surface of the body or rectum may be raised several degrees, yet this is, as it were, at the expense of some other part, and there is not any real increase in the heat of the body. Hyper-pyrexia he regards as the result of a disturbance of all three of the mechanisms. From an evolutional standpoint Dr. MacAlister looks upon fever as a dissolution —a relaxation of control from above downwards.

If general paralysis is, as all the latest researches tend to

show, a disease of the highest and last evolved nervous structures, this Thermotaxic centre, if it exists, would probably be involved, and hence we should expect to get variations of temperature without increase in amount of heat; that is, without increase in tissue, metabolism, or nitrogenous excretion—a condition of affairs which, as far as my observations go, obtains in general paralysis.

In the cases where the temperature was noted whilst the urine was being collected it was found that there was no relation between the height of the temperature and the amount of urea excreted. The temperature of No. 4 in Table II., for instance, was taken twice daily for several weeks at a time on more than one occasion, and he was found to have a persistently heightened temperature; and on the occasion when the urine was collected it was 102·2° at the beginning and 99·6° at the end of the 24 hours. Yet this man, at whose post-mortem there was no evidence of kidney or liver disease, etc., only excreted 26·44 grammes of urea in the 24 hours. In Tables IV., V., VI., and VII. I have shown the temperature (rectal) morning and evening (between four and six) for several days in four cases, and also the nitrogen excreted at stated times during these periods. Unfortunately, in E. P., Table IV., diarrhœa supervened on the 23rd, and no more urine could be collected; bed sores formed rapidly, and he died on the 6th October, 1888, the rectal temperature on that day being 105°. In Table V., with a temperature reaching on one occasion to 102°, the nitrogen excreted was never in excess, and on one occasion was decidedly low. Tables VI. and VII. show practically a healthy state of affairs; in the latter there was a rise of nitrogen excreted, noticed coincident with extra labour and beer. During the course of severe seizures we may get, along with a rise of temperature, an increase in the amount of nitrogen excreted, indicating an excessive nitrogenous metabolism and destruction of tissue—in other words, a true pyrexia; but this is strictly in accordance with the theory, for in these cases there is little doubt that the disturbance caused by the seizure extends and involves the Thermogenic and even the Thermolytic centres. This condition is seen in Table IV. On the 9th September the patient had a seizure (see page 355); the temperature rose from 102° to 103·5°. The following day I succeeded in obtaining by a catheter his urine for nine hours; it contained 37 grammes of urea, equivalent to 98·6 for 24

hours. That this probably represents the amount really excreted in 24 hours is borne out by the fact that on the following day five hours' urine was drawn off, and was found to contain rather less than one-fifth of the total amount in 24 hours.

On two other occasions I have examined the urine of patients having seizures. In one the urine for 18½ hours was drawn off by the catheter. This man was unconscious, and convulsed strongly. His temperature in the mouth on the accession of the fit was 99·2°. He continued to have a rapid succession of convulsive seizures, remaining completely unconscious until he died on the fourth day. The temperature in the axilla rose to 101·6°, and there was profuse sweating. The urine was obtained on the second day of the attack, and contained only 18·29 grammes of urea, which would be equivalent to 23·7 grammes for 24 hours. In another case the patient had a slight seizure. There was no complete loss of consciousness, and only very slight twitchings of the muscles on the left side. No sweating. He was speechless, and passed fæces and urine under him. His rectal temperature, when catheterized, was 103·5°, falling in the evening to 102°. The attack was very transient. I could only obtain the urine for four hours. The percentage of urea was 1·58, total four grammes, equivalent to 24 grammes for 24 hours. The nitrogen in the urea was calculated to be 1·86 grammes, and that from soda lime two grammes. It is possible that in the first case, if I had been able to collect the urine later on as the temperature rose, an excess of urea would have been found. In the latter case the seizure was transient. There was probably no true pyrexia, because the Thermogenic centre was not involved, owing to the slightness of the attack.

The evidence here brought forward is not by any means conclusive, but it tends to bear out the idea that the eccentricities of the temperature observed in general paralysis depend upon a dissolution of the higher nervous centres, involving some regulating mechanism, the disturbance of which upsets the balance but does not increase the amount of heat, and cannot be satisfactorily explained by regarding it as due to a chronic inflammatory condition.

TABLE I.

In grammes.

No.	Initials.	Date.	Amount in cc.	Urea.	P_2O_5.	P_2O_5 in combination with earths.	Do. do with alkalies.	Stage of Disease.	Remarks.
1	J. H.	29 Aug., '85	1704	26·6	—	—	—	Second	
2	,, ,,	10 Sep., ,,	3124	30·6	—	—	—	,,	
3	,, ,,	20 Feb., '86	1704	34·0	—	—	—	Third	
4	C. L.	28 Sep., '85	3057	22·4	—	—	—	First	
5	J. P.	15 Feb., '86	426	15·3	—	—	—	Third	16 hours' excretion
6	J. F.	5 May, '86	1420	55·4	—	—	—	Acute	
7	G. T.	1 ,, ,,	1406	18·3	—	—	—	Second	18½ hours' excretion
8	E. O.	5 Feb., ,,	1079	31·34	—	—	—	,,	
9	,, ,,	6 ,, ,,	1406	29·77	—	—	—	,,	
10	,, ,,	7 ,, ,,	1533	23·85	—	—	—	,,	
11	,, ,,	8 ,, ,,	2215	29·81	—	—	—	,,	
12	,, ,,	9 ,, ,,	1761	29·87	—	—	—	,,	
13	,, ,,	0 ,, ,,	1761	29·80	—	—	—	,,	
14	,, ,,	11 ,, ,,	1874	34·64	—	—	—	,,	
15	,, ,,	2 ,, '87	2130	30·46	2·13	0·5	1·6	,,	
16	G. H.	16 Nov., '86	2016	23·47	—	—	—	,,	
17	,, ,,	17 ,, ,,	2584	27·00	—	—	—	,,	
18	,, ,,	18 ,, ,,	1604	14·50	—	—	—	,,	
19	,, ,,	19 ,, ,,	1905	23·60	—	—	—	,,	
20	,, ,,	20 ,, ,,	1306	19·50	—	—	—	,,	
21	,, ,,	28 Jan., '87	1562	23·40	2·09	0·78	1·3	Third	
22	,, ,,	9 Mar., ,,	1420	15·62	1·60	0·25	1·34	,,	
23	W. B.	15 Nov., '86	1704	17·50	—	—	—	Second	
24	,, ,,	16 ,, ,,	1548	18·14	—	—	—	,,	
25	,, ,,	17 ,, ,,	1193	19·50	—	—	—	,,	
26	,, ,,	18 ,, ,,	1562	19·00	—	—	—	,,	
27	,, ,,	19 ,, ,,	1420	13·37	—	—	—	,,	
28	,, ,,	28 Jan., '87	1221	30·00	1·90	0·70	1·20	Third	
29	E. L.	,, ,, ,,	1363	18·50	1·76	0·27	1·49	,,	
30	,, ,,	10 Mar., ,,	1477	24·50	1·90	0·40	1·40	,,	
31	H. B.	28 Jan., ,,	1619	17·30	1·50	0·26	1·20	First	
32	,, ,,	27 Feb., ,,	2101	18·70	1·80	0·25	1·55	,,	
33	J. F.	30 Jan., '87	—	16·50	1·30	0·50	0·80	Second	
34	H. J.	1 Feb., ,,	1761	19·00	2·10	0·35	1·76	First	
35	J. H.	5 ,, ,,	880	17·10	1·20	0·35	0·85	Second	
36	A. H.	4 Mar., ,,	1988	21·87	2·14	0·26	1·88	First	
37	H. O.	7 Apl., ,,	2386	31·90	2·50	0·24	2·26	Second	
38	G. C. D.	13 Nov., ,,	1931	20·47	1·90	0·40	1·50	,,	
39	,, ,, ,,	13 Sep., '88	1704	19·76	1·40	0·80	0·60	,,	
40	,, ,, ,,	18 ,, ,,	1449	20·27	2·00	0·25	1·75	,,	
41	,, ,, ,,	21 ,, ,,	1050	24·80	2·00	—	—	,,	
42	,, ,, ,,	24 ,, ,,	2130	23·00	1·96	0·59	1·37	,,	
43	J. R.	17 Nov., '87	994	26·40	1·67	0·22	1·45	,,	
44	T. G.	,, ,, ,,	1079	31·00	2·50	0·68	1·82	First	
45	,, ,,	25 Sep., '88	2215	22·15	2·34	—	—	,,	
46	,, ,,	29 ,, ,,	937	21·55	1·29	—	—	,,	10 hours' secretion
47	,, ,,	30 ,, ,,	1392	33·40	2·50	—	—	,,	
48	,, ,,	3 Oct., ,,	2300	32·20	2·11	—	—	,,	
49	H. G.	19 Nov., '87	2414	23·17	1·70	0·55	1·15	,,	
50	H. J. S.	25 ,, ,,	1136	18·20	1·40	0·27	1·13	,,	
51	R. E.	28 Apl., '88	1575	23·60	2·05	0·68	1·37	,,	
52	,, ,,	18 Sep., ,,	1988	27·80	2·50	0·75	1·75	,,	
53	,, ,,	21 ,, ,,	1931	26·00	2·00	—	—	,,	
54	,, ,,	24 ,, ,,	2272	26·80	2·00	1·00	1·00	,,	
55	R. F.	27 May, '88	2125	32·70	2·20	0·63	1·56	,,	
56	G. W.	7 June, ,,	1278	22·00	2·68	0·55	2·13	Second	
57	R. C.	8 ,, ,,	1000	26·00	1·42	0·60	0·80	First	
58	E. P.	8 Sep., ,,	1562	16·87	1·03	0·15	0·87	Second	
59	,, ,,	9 ,, ,,	2669	28·30	1·50	0·50	1·00	,,	
60	,, ,,	11 ,, ,,	1448	37·00	2·46	—	—	,,	9 hours' secretion
61	,, ,,	12 ,, ,,	795	42·00	4·00	0·86	3·14	,,	
62	,, ,,	18 ,, ,,	625	27·50	0·50	0·18	0·32	,,	
63	R. D.	4 Oct., '88	2527	27·80	—	—	—	,,	
64	W. H.	16 Feb., '87	696	21·36	1·50	0·60	0·90	Third	
65	,, ,,	9 Mar., ,,	1250	21·24	1·57	0·25	1.30	,,	

TABLE II.

No.	Initials.	Amount of urea in grammes for 24 hours.	Temperature (rectal).	
			At commencement.	At finish.
1	G. H.	23·47	99·4	98·8
2	,,	27·00	99·9	99·4
3	,,	14·50	100·0	99·4
4	J. R.	26·44	102·2	99·6
5	T. G.	31·08	99·1	99·4
6	H. J. S.	18·20	100·0	99·0
7	G. C. D.	20·47	98·6	98·6
8	H. G.	23·17	99·0	100·6
9	R. E.	23·62	99·2	99·0
10	J. F.	32·70	98·0	98·4

TABLE III.

No.	Initials.	Urea in grms.	N. in urea in grms.	N. by Soda Lime.	Rectal Temp.	
					At beginning.	At finish.
1	E. P.	16·87	7·87	7·65	99·0	98·2
2	,,	28·30	13·20	13·40	99·5	99·3
3*	,,	37·00	17·25	17·00	102·0	102·2
4†	,,	10·22	4·76	4·54	101·0	100·7
5‡	,,	31·80	14·84	14·30		
6	,,	27·50	12·80	10·50	101·6	104·5
7	G. C. D.	19·76	9·22	10·50	97·6	99·4
8	,,	20·27	9·46	8·40	100·2	100·0
9	,,	24·80	11·50	13·50	99·4	97·6
10	,,	23·00	10·70	9·00	99·2	—
11§	,,	4·00	1·86	2·00	103·5	—
12	R. E.	27·80	12·97	12·20	99·2	99·0
13	,,	26·00	12·00	11·00	98·6	99·0
14	,,	26·80	12·30	11·30	98·6	—
15	T. G.	22·15	10·30	10·50	99·2	99·5
16‖	,,	21·55	10·00	10·50	98·7	99·2
17	,,	33·40	15·50	14·80	99·6	98·6
18	,,	32·20	15·50	14·10	—	99·6
19	R. D.	27·80	12·90	11·30	98·2	98·4

* Nine hours' secretion. ‡ Nineteen hours' secretion. § Four hours' secretion.
† Five hours' secretion. ‖ Ten hours' secretion.
In every other instance the figures represent the urea, etc., secreted in 24 hours.
The temperature was taken at the beginning and end of this period (24 hours).

TABLE IV.—E. P.

Date. 1888.	Temperature.		Nitrogen in grammes.	
	M.	E.	Soda Lime.	Ureal.
Sept. 7th	99·0	99·8	—	—
,, 8th	98·2	99·5	7·6	7·87
,, 9th	99·3	100·0	13·4	13·20
,, 10th	102·0	103·5	—	—
,, 11th	102·2	—	17·00 (9 hours)	17·25 (9 hours)
,, 12th	101·0	100·7	—	—
,, 13th	98·8	98·4	18·74	19·60
,, 14th	98·2	98·8	—	—
,, 15th	97·2	97·4	—	—
,, 16th	97·4	—	—	—
,, 17th	100·4	102·0	—	—
,, 18th	101·6	104·5	—	—
,, 19th	99·4	101·0	10·50	12·80
,, 20th	99·0	100·0	—	—
,, 21st	99·4	100·6	—	—
,, 22nd	99·0	—	—	—
,, 24th	99·2	—	—	—
Oct. 6th	105·0	—	—	—

TABLE V.—G. C. D.

Date. 1888.	Temperature.		Nitrogen in grammes.	
	M.	E.	Soda Lime.	Ureal.
Sept. 11th	98·2	—	—	—
,, 12th	98·0	99·4	—	—
,, 13th	97·6	99·4	10·50	9·22
,, 14th	99·0	100·0	—	—
,, 15th	98·8	100·4	—	—
,, 16th	99·6	101·0	—	—
,, 17th	100·2	101·6	—	—
,, 18th	100·2	102·0	8·40	9·60
,, 19th	99·0	101·0	—	—
,, 20th	98·0	99·4	—	—
,, 21st	97·6	100·6	13·50	11·50
,, 22nd	99·2	—	—	—
,, 24th	99·2	100·2	9·00	10·70
,, 25th	98·2	98·0	—	—
,, 26th	98·2	99·6	—	—

TABLE VI.—R. E.

Date. 1888.	Temperature.		Nitrogen in grammes.	
	M.	E.	Soda Lime.	Ureal.
Sept. 17th	100·6	98·8	—	—
,, 18th	99·2	99·0	12·20	12·97
,, 19th	99·2	98·2	—	—
,, 20th	98·6	98·6	—	—
,, 21st	99·0	99·2	11·00	12·00
,, 22nd	99·8	—	—	—
,, 24th	98·6	—	11·30	12·30

TABLE VII.—T. G.

Date. 1888.	Temperature.		Nitrogen in grammes.	
	M.	E.	Soda Lime.	Ureal.
Sept. 25th	99·5	99·4	10·5	10·3
,, 26th	99·2	99·2	—	—
,, 27th]	99·1	98·8	—	—
,, 28th	98·6	98·7	10·5 (10 hours)	10·0 (10 hours)
,, 29th	99·2	99·6	—	—
,, 30th	98·6	99·2	14·8	15·5
Oct. 1st	98·6	99·5	—	—
,, 3rd	99·6	100·5	14·10	15·5

On the Study of Conditions of Development and Brain-Power in Children. By Francis Warner, M.D.Lond., F.R.C.P.,* Physician to the London Hospital.

My present purpose is to show the importance of acquiring further knowledge as to the conditions of development, and as to the physical and mental brain-powers of children, and the desirability of diffusing a knowledge of scientific methods of study among those whose profession it is to train children.

The first question is whether we possess sufficient knowledge of scientific methods by which to pursue such inquiries. We all desire to render our observations more and more exact, and to describe all our facts in such form as may enable us to study them as branches of physical science. We would gladly employ in our descriptions only such terms as connote facts seen, without reference to what cannot be seen or measured, or brought within the laws of physical science. It appears within the bounds of possibility that our observations should be rendered so exact as to enable us to give descriptions of brain states in terms of physical signs, in place of using such general terms as "consciousness," "sleep," "intellectual power"—terms which do not correspond to any single set of visible signs.† The methods of procedure employed by the School Committee‡ of 1888 were found to work well, doubtless improvements in method, and greater accuracy in observation, and in description, might be attained by further experience, but a basis appears to have been established by which the medical inspection of pupils in schools may be reasonably conducted. My experience in taking notes of about 800 pupils in schools is very favourable to the method and form of schedule used by the Committee of 1888, but to do this work on a larger scale, without too great an expenditure of time, it is very desirable to have a clerk at hand to record the notes of the observer, the number of children in each standard, etc., thus leaving the observer free to look at the children continuously, without the distraction of the clerical portion of the work. The labour of analyzing the notes taken, and the preparation of statistics has been as great as the work done in schools, but this might be lessened by forms of schedules, and by the services of a clerk

* Paper read at the Psychology Section of the British Medical Association held at Leeds, Aug., 1889.

† See author's "Anatomy of Movement."

‡ "Brit. Med. Journ.," 27th July, 1889.

trained in such work. Among the signs recorded, those which indicate the balance and action of the nerve-centres, *i.e.*, the balances or postures of the body, the visible movements, and observations on the time of movements and the quickness of response, are the most valuable. It is also worth noting whether action is most readily stimulated through the eye or the ear.

Further observations in schools are needed.—The work of the Committee has produced results suggesting questions which cannot be completely answered at present, though indications have been obtained as to the directions in which further information is required. We need to systematize further the methods used in making observations, and to ascertain more accurately the relative value of the different physical signs, and the brain conditions probably accompanying them respectively.

In the ten highest class schools,* as compared with the four schools for exceptional children, we found the frequency of the "nervous hand posture" and over-action of the frontal muscles, present in an inverse ratio. See Report, Table K. :—

	Nervous Hand.			Frontals over-acting.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Ten public elementary schools ...	39	49	88	22	2	24
Four exceptional schools	19	4	23	24	3	27
	58	53	111	44	5	49

The classification of children is important.—It appears that "children of low type" are in part definable by defects of the cranium, the palate, and the features, and in the character of the nerve-system by over-action in the muscles of the forehead and of the mouth, by the feeble hand posture and lordosis. Such cases appear more common among boys than girls. Nervous children, and those showing signs of nerve-weakness, are indicated by the average postures or balance of the hand, head, and back, as well as by loss of tone in the

* The ten Public Elementary Schools contained—Boys, 1944; Girls, 1987. The four Exceptional Schools contained—Boys, 850; Girls, 563.

orbicular muscle of the eye-lids, and numerous small movements occurring without apparent stimulation. Rickets and low nutrition appear to be predisposing causes of neuroses. Such cases are far more common among girls than boys. Mental dulness frequently coexists with defects in development and low nutrition. Mental tests are, however, necessary to discover mental dulness.

Scholastic profession.—The second question that I wish to bring forward is the desirability of placing before members of the scholastic profession the importance of a knowledge of methods of studying the conditions of development and individuality of brain-power among their pupils. Many of the most difficult problems in education are concerned with such knowledge; it is only necessary to mention such questions as the classification of pupils, the assessment of the value of educational work in primary schools, provision for the mental culture of exceptional or defective children,* to show that the careful scientific study of brain conditions is a matter of primary importance to the educator.

Among matters of primary importance to the two professions I may mention:—(1) A knowledge of the condition of children in the various social classes. This is illustrated in the Committee's report in Table D., where the facts observed in different schools are compared. (2) We need to ascertain the relative composition of our child population, and the percentage of congenitally ill-developed children. Such facts are needed in any attempt to determine the causation of special conditions, such as nervousness, or tendency to criminality, etc.

Instruction given to teachers in this kind of knowledge, including not only some acquaintance with physiology, but also such as may enable them to observe for themselves, will give a more valuable scientific training than any abstract teaching of science alone. A knowledge of natural history may be combined with the study of human physiology; these subjects already form part of the teacher's training, and might be combined with a natural system of studying children. The children are ever around the teacher, and if he is taught to observe them there will be some chance that he will continue to observe facts, and learn to form opinions as to his duty towards the pupils, as well as gain knowledge for the solution of larger social questions.

* See Dr. Hack Tuke and Dr. Shuttleworth, "Journal of Mental Science," Jan., 1888, p. 552, and April, 1889, p. 80.

A Study of Stupor.

By James R. Whitwell, M.B., Assistant Medical Officer, West Riding Asylum, Menston, near Leeds.

The manifestation of vital activity demands the consumption of material, and the diminution or absence of this material, of a necessity, and proportionately, compels the diminution of absence of the power of manifestation of vital activity. Take, for instance, the comparatively crude example of starvation.

In general malnutrition the nervous system certainly suffers, not so much, however, in the direction of its simple vegetative existence as in the capability of manifestation of its functional activity. That the nervous system should suffer in general malnutrition is highly rational, considering that in the case of the encephalon the blood supply is so markedly against gravity, and in the case of the spinal cord, as pointed out by Dr. Moxon,* there are sufficient anatomical reasons to suggest a difficulty in carrying on the circulation even in healthy persons. The earlier mental symptoms of starvation are naturally those psychical conditions brought about by the abdominal pain, invariably present in these cases, then follows some mental lethargy and stupor, interrupted, it may be, by attacks of almost maniacal excitement, proceeding to a gradually increasing stupor and torpidity, the mental faculties becoming steadily obscured in proportion to the failure of bodily nutrition. This, then, is a clinical picture of an acute malnutritional neurosis which may be looked upon almost as an experimental insanity, inasmuch as by a definite interference with the usual course of nature a definite mental sequence has occurred. It is then only fair to conclude that the symptoms enumerated have for their basis a want of food supply to the nervous system which leads to the condition called "irritable weakness," at first sight simulating hyper-activity, and from this proceeding to a gradually increasing stupor which ends in death.

Now this picture of an acute malnutrition is a type of what occurs daily in a certain class of cases, namely, the large group of mental diseases which have it for their basis, though not perhaps solely due to malnutrition—a series which includes phthisical insanity, the more common forms of post-febrile

* "Croonian Lectures on Influence of Circulation on the Nervous System," "Lancet," April, 1881.

insanity, lactational and post-lactational insanity, and many others.

But the term malnutrition, in its wider sense, applies to the result of a deficient supply of any of the animal food requirements, and therefore there may be a dystrophoneurosis arising from not only abnormal conditions of the digestive process and absorptive mechanism, but also from certain pulmonary cardio-vascular and other conditions. That is to say, theoretically, a dystrophoneurosis may arise from an interference with the supply or transmission of food on the one hand, and the molecular condition or trophic energy of the tissue on the other.

The leading symptoms, then, of these nutritional forms of insanity are the expression of a badly-nourished and exhausted brain. It may be that the blood is insufficiently oxygenized, or that its nutritive value is diminished in other ways, more frequently, perhaps, to both conditions in a varying degree, or, again, it may be that the actual amount of blood reaching the nervous system is deficient. And it is in just these cases that marked mental improvement occurs in the hyperæmia of an incipient eruptive fever, or the febrile condition coincident with an acute attack of some intercurrent disease, a change strictly comparable to the improvement which takes place in a semi-comatose fever patient when immersed in cold water, or the improvement which takes place in the insane delirium of some heart cases by placing the head low, as suggested by Dr. Moxon,* or to the markedly beneficial result of the postural treatment of syncope. In all these cases the improvement is evident, and, doubtless, is due to the removal of the immediate, though not the remote, causative condition, namely, the anæmia of the brain.

It is evident, then, that if a series of mental diseases are to be classed under the collective title of "dystrophoneurosis," and the word malnutrition, which is the key-note of the division, be employed in its wider sense, that the group must necessarily be a large one, the mere enumeration of whose members would require considerable care. We will then select one member of the group for investigation in greater detail, namely, the peculiar form of mental disease termed acute dementia by Esquirol,† stupor, stupemania, stupidité by

* *Op. cit.*

† French alienists have now quite discarded this term as misleading in regard to the pathology of this state. See paper in the "Transactions of the International Medical Congress," 1881, on "Mental Stupor," by Dr. Hack Tuke, who

other writers, psycho-coma by Clouston,* and anergic stupor by Hayes Newington.† Excluding, however, from this heading the condition which has been called, though not differentially, mélancolie avec stupeur by Baillarger, and melancholia attonita by other authors, because, though these two conditions have many points of resemblance, they have also, in general, a sufficient number of points of difference to allow of a differential diagnosis being made during life. The following may be taken as a fairly typical case, selected at random from a series of cases under observation, the enumeration of the points of which will serve the purpose of a definition of the class of cases referred to under the head of stupor.

M. W., æt. 21, a girl, admitted to the asylum on certificates which indicated that she was dull, stupid, and refused to give any proper answer to simple questions, was very quarrelsome, and spoke to parents in an improper manner, refused to attend to her own personal cleanliness, and was sometimes destructive.

Her father says she has been a mill worker, and has "tried to master her work, but had never done so properly, and has worried about it." She has never had any fright or serious illness, nor been intemperate as regards alcohol, and as far as he knows she has led a moral life. No history of phthisis or epilepsy. Mother's uncle in an asylum.

Patient was a fairly well-built and nourished girl, of light complexion and grey eyes. She had a dull, stupid appearance and manner, and when spoken to looked at her questioner without answering, and when told to do anything, only did it with a good deal of urging. When questioned she is sullen, sometimes, however, laughing a little to herself. Later she became irritable when interfered with, and sometimes became violent. She usually sat still all day in the same position doing nothing, the saliva dribbling from her mouth, and her extremities blue and cold. She became altogether dirty in her habits, and required feeding, washing, and dressing, until gradually she developed phthisis and died.

This, then, is a picture of the so-called "acute dementia,"—a history of more or less distant or indirect heredity, if any, a mental or moral strain, possibly not greater than usual, about the period of adolescence, and then follow the mental symptoms with their physical expression, and earliest, almost invariably, is a period of irritability, manifested by quarrelsomeness

has given the results of a series of cases in which the mental condition present during the attack was ascertained after recovery. These cases prove that in a large number of cases in which the mind appeared to have been a complete blank, and the diagnosis of so-called "Acute dementia" had been made, the patient was in reality the victim of a terrible and overpowering delusion.

* "Clinical Lectures on Mental Diseases," 1883, p. 287.

† *Ibid.*, and "Journ. Ment. Sci.," Oct., 1874.

and intolerance, the almost invariable mental symptoms of a badly-nourished brain, and later come lethargy and stupor, with attacks, it may be, of almost maniacal violence if interfered with, proceeding to a gradually-increasing torpidity, till death takes place, or a return journey is made by the same stages to recovery. It cannot be denied that the course of the mental symptoms closely resembles that produced by simple starvation, though naturally differing in numerous details. Be that as it may, this typical form of stupor is manifestly a nervous system not working sufficiently, when it is taken into consideration that the age at which it usually occurs is that at which the mental, bodily, and sexual activities are very prominent normally, and it seems fair to assume, from the analogical argument, that the insufficient working may be due to insufficient food material. There are, however, other arguments which occur to suggest this reason for the condition. As previously mentioned, in the febrile condition there is almost invariably some mental improvement in these cases; for instance, many of them die of phthisis, and in most, when the pulmonary lesion is advancing rapidly, the temperature correspondingly raised, as it commonly is, and the circulation quickened, a certain appreciable degree of brightening takes place. More markedly, however, is this the case if pneumonia be the intercurrent disease. Again, there are undoubtedly many cases amongst them which are benefited by various nitrites, administered internally or by inhalation—chemical agents, whose main action * is to dilate the arterioles and quicken the circulation, the brightening effect, however, being only transitory, as the action of the drug also is. Again, Dr. Riva † has described a case of intermittent lypemania which was improved by transfusion, a mode of treatment which, being of at least temporary service in all conditions of anæmia, would suggest malnutrition of the brain as a cause of this state. The effect of suddenly applied cold water on these cases is also an argument in favour of this view, in that the cutaneous vascular areas being constricted, the temperature is slightly raised, respiration and circulation quickened, and the supply of blood to the brain is thus rendered more efficient. There is, in addition, some experimental evidence which may be adduced to show that the effect of diminished blood supply to the brain is such as is present in the condition of stupor. Victor Horsley and Walter Spencer, ‡ in a series of experi-

* "Pharmacology," "Therapeutics and Materia Medica," T. Lauder Brunton.
† "Rivista sperimentale di Freniatria e di Medicina Legale," 1877.
‡ Scientific Grants Committee Report, "Brit. Med. Journ.," March, 1889.

ments have recently demonstrated that the stimulus necessary to evoke a motor response in a cortex normally supplied with blood must be increased if the blood supply be diminished, the stimulus and the blood supply thus standing practically in an inverse ratio. This is an exactly analogous condition to that which occurs in stupor, for instance. Simple speaking to a patient in this state frequently produces no result, a stimulus which in the healthy brain condition does so, but if in addition the patient be taken by the shoulder and shaken, or the interrupted current be applied, a result most frequently is produced, this additional stimulus being analogous to the experimental approximation of the secondary spiral of a Du Bois Reymonds induction coil. Again, the effect of food on these cases is sufficiently marked to call attention to the fact that the mental and bodily conditions improve step by step—it may almost be said pound by pound, since at a certain stage the loss or gain of three or four pounds produces a definite and corresponding change in the mental condition.

Assuming, then, that the condition called "acute dementia" is due to a chronic malnutrition of the brain, the proximate cause of this malnutrition becomes the next question. Now the blood vessels, as usual, have received their share of attention on this subject—Etoc Demazy* having long ago considered that it was due to a passive congestion of the brain, followed by an infiltration of serum into the hemispheres, by which the convolutions were subjected to pressure from within, and consequently flattened against the cranium. A somewhat similar opinion was also held by Dr. Scipion Pinel. Others, however, including Dr. H. Mabille, oppose this view. Dr. Crichton-Browne † suggests a "state of the vessels allied to chilblains, a condition of atony ‡ of the intracranial vessels." Dr. Luys § considers, on the other hand, that the condition is often the result of vaso-motor spasm, by which the nervous elements are deprived of their proper supply of blood; and Dr. Tèbaldi evidently assumes this condition, since he uses amyl-nitrite to dilate the peripheral arterioles with undoubtedly good, though temporary, effect in certain cases.

Now, given a certain cranial capacity, and a normally proportionate encephalic mass, it is certain that an equally definite relative amount of blood must also be contained within the cranium to supply nutritive material in sufficient quantity

* "De la stupidité considérée chez les aliénés," Paris, 1835.

† West Riding Reports, Vol. iv., 281.

‡ The mistake, however, must not be made of confounding "*atony*" with "*attonita*," which owns a totally different etymology.

§ "Leçons cliniques sur les maladies mentales," Paris, 1883, 176.

for the use of the vast protoplasmic laboratories of the grey matter; if this blood fall short in quantity, imperfect nutrition of the brain, a degree of starvation, and consequent imperfect action must necessarily ensue. Moreover, though the proportionate volumes of encephalic blood do not undergo a relative diminution, still, variations in cerebral function can be induced by altering the constituents of the blood in various ways, by introducing into it such bodies as morphia, cannabin, picrotoxin, alcohol, certain leucomaines, and other substances, by diminishing its nutritive quality or degree of oxygenation, seen in many diseases, or by increasing or diminishing the rapidity of its flow.

The volume of the encephalic blood may be diminished by anything which lessens the absolute quantity of blood in the body as a whole, such as bleeding, or its relative quantity as in shock, by a variety of bodily conditions, such as cardiac derangements interfering with its propulsion, or by diminution of the calibre of the vessels. In Table I., on page 366, is shown a list of diameters of basal vessels (two carotids and basilar only), being portion of a series collected for other purposes, and taken quite at random as regards mental condition. The measurements were made by means of a series of gun-metal cones, and the point where complete extension without distension occurred was regarded as the normal diameter of the vessel.

In certain of these cases the cause of the change is very obvious in the occurrence of atheroma, which causes a decided though not great diminution, or in the syphilitic cases, especially 14 and 18; in the former, the lower of the two measurements was taken in the cavernous sinus, and demonstrates a dilatation secondary to weakening of the wall by syphilitic arteritis, and in the latter case a tendency to occlusion is marked. The other cases in the list which show any marked diminution of calibre are all cases of marked stupor, No. 4 being a very marked case in which this stenotic condition was present. In No. 6, again, there was a further complication in the form of a tumour of the falx cerebri, of considerable size, invading the internal surface of both hemispheres, but no history of the previous mental condition of the patient was obtainable. Nos. 4, 9, 13, and 19 were practically pure cases of stupor, though in the last were points of special interest, to be referred to later.

That this stenotic condition of the arterial system of the brain must have considerable effect seems evident from the following table, in which the corresponding cubic capacity of a tube one ctm. long, and having these various diameters, is shown,

TABLE I.

	Name.	Sex.	Age	Mental condition.	R. Cd.	L. Cd.	Bas.	Remarks.
1	A. C.	M.	62	Senile melancholia	4	3	3	
2	W. H.	M.	22	Mania	3·5	3·5	2·5	
3	D. W.	M.	62	Senile dementia	4	4	—	
4	C. F.	F.	38	Stupor	1·5	2	2	
5	J. L.	M.	47	General paralysis	3	3	—	
6	C. K.	F.	27	Epilepsy, stupor, and dementia	2·5	2·5	—	Tumour of dura, involving brain substance. No history obtainable.
7	G. T.	M.	40	Resistive melancholia	3	3	—	
8	A. M.	F.	60	Chronic melancholia	3·5	3·5	—	
9	S. P.	F.	19	Stupor	1·75	2	2	Aorta and all vessels very small, and, in addition, mitral stenosis.
10	H. H.	F.	18	Imbecile	3	2·5	1	
11	W. B.	M.	65	Melancholia & dementia	3·5	3·5	5	
12	B. W.	M.	38	General paralysis	3	4	3	
13	M. B.	F.	23	Stupor	2·25	2	1·75	Vessels throughout body of small calibre.
14	W. S.	M.	60	Dementia (syphilis)	$\frac{4·5}{6}$	5	2·5	Syphilitic case ascertained.
15	M. R.	F.	21	Epileptic	3·5	4	2·5	
16	J. D.	M.	68	Senile dementia	3·5	3·5	—	
17	P. C.	M.	42	General paralysis	3	3	3	
18	M. W.	F.	40	General paralysis	2·75	3·5	2	Syphilitic ascertained.
19	B. M.	F.	25	Stupor	2·5	2·5	2·5	
20	A. A.	F.	40	General paralysis	3·5	3·5	3·5	
21	M. T.	F.	27	Imbecile	3	3	2·25	
22	C. W.	F.	40	General paralysis	3	3·5	3	
23	M. C.	F.	39	Epileptic	3	2·8	2·5	
24	E. O.	F.	45	Imbecile	2·8	3·5	2·25	
25	H. E.	F.	53	General paralysis	3	3·5	2·5	
26	M. E. K.	F.	36	General paralysis	3·5	3·5	4	
27	S. W.	F.	59	Dementia	4	3·5	3·25	
28	G. G.	M.	42	General paralysis	4	5	3·5	
29	E. B.	M.	66	Senile dementia	4·5	4·5	4	
30	J. M.	F.	37	Epileptic	3·5	3	2·75	
31	P. C.	M.	60	Dementia	3·5	3	2·5	
32	M. M.	F.	48	Mania	3·5	3·5	2·5	
33	M. W.	F.	42	Mania	3	3·5	2·5	
34	M. D.	M.	35	General paralysis	3	3·5	2·5	
35	J. H.	M.	55	Epileptic	4·5	4·5	3	
36	P. T.	F.	34	Epileptic	2	3	2·5	Right hemisphere practically a cyst.
37	J. S.	M.	68	Senile melancholia	3·5	4	3·5	
38	G. M.	M.	33	Epileptic	4	3	2·75	
39	C. B.	M.	47	Imbecile	5	5	3	
40	E. M.	M.	35	General paralysis	4	4.5	4	

by which the volumetric difference is brought out in a most striking manner.

Table II.

Diameter in mm.	Cubic capacity of tube 1 ctm. long.
1·5	17·67
1·75	24·05
2	31·41
2·25	39·76
2·5	49·08
2·75	59·39
3	70·68
3·5	96·21
4	125·66
4·5	159·04
5	196·35

If this table be looked upon as a descending series the position may be perhaps aptly compared to the condition of syncope occurring in an otherwise healthy individual, in whom a certain amount of intracranial blood in relation to his cranial capacity means general mental health, a slight diminution causing some headache, languor, lethargy and general malaise, this condition gradually proceeding to unconsciousness, while returning consciousness and mental health gradually occur on the head being placed low with the necessary sequence of increase of intracranial blood. This is analogy closely comparable, though much more acute in its course, to the condition of stupor, which, if this view be correct, must be regarded as a condition of "stenotic" dystrophoneurosis as contrasted with the other forms of mental disease included under this name.

As to the cause of the markedly diminished calibre of the vessels in certain of these cases of stupor, some mention is necessary. In some of the cases it is most probably due to a condition of general arterial stenosis throughout the body, this being most markedly the case in Nos. 9 and 13, where all the arteries from the aorta upwards and downwards were of markedly small size, while the relative thickness of their tunics was undisturbed, this being most probably of congenital origin, the heart also being of small size. The right carotid in Case 4, which is the smallest in the series, presented features other than these, in that the intima, at a point immediately previous to the emergence of the vessel through the dura, presented a

marked local thickening composed of a fibrous tissue hyperplasia, attaining to a transverse measurement of ·13 mm., whereas the intima at the other portions of the same segment at its greatest only reached ·013 mm.; at this point also there was a gelatinous thickening of the adventitia, which was composed of loosely arranged fibrous tissue with somewhat wide meshes, without formative cells or signs of inflammation, the muscular layer between these two being intact. It is somewhat difficult to give an explanation of the occurrence of this nodule, and as the brain only was permitted to be examined, it is not known whether any other vessel showed a like change, and no other was observed in the meninges. It may be that it was due to a syphilitic arteritis or perhaps a form of periarteritis allied to the cases described by Kussmaul and Maier* under the name of "peri-arteritis nodosa," and also by Meyer,† or possibly it may be an arterial condition secondary to the phthisis (of which the patient died), causing a chronic inflammation of the inner coat such as has been described by Cornil and Ranvier, Heubner, Greenfield, and more recently by Dr. R. Thoma as "nodose chronic fibrous endarteritis," and still more recently studied again by Dr. N. Sh. Ippa, of St. Petersburg. Of whatever significance the condition may be it is certain that it added to the tendency to occlusion of the vessel. In Case 19 the diminution was not so great as occurred in some of the others, but this is especially interesting in the fact that there was present a decided degree of renal cirrhosis, a point which would seem of great importance, when the general views as to the relationship of the vascular system to cirrhotic kidney are taken into consideration, and the more so since it appears that a degree of stupor and lethargy is not at all an uncommon mental condition in chronic Bright's disease, and probably more frequent in the young than the typical "folie brightique" of Dieulafoy.‡

If, then, it be true that in these cases there really is a diminution in the calibre of the basal vessels, it would be natural to assume that the branches given off by these vessels, retaining their normal relation of capacity, would also show this condition, and to see if this were true an examination of the fundus oculi was undertaken in certain of the cases, with the result that there certainly was discernible distinct pallor in this region, though possibly scarcely going beyond what must be looked upon as the limits of physiological variations, and

* "Deutsch. Arch. f. Klin. Med.," 1.

† Virchow's "Archiv.," Vol. lxxiv.

‡ V. Girandeau, "Archives Générales de Médecine,' Jan., 1886.

there can be no doubt that the terms anæmia and hyperæmia of the fundus are attributive expressions, in the use of which considerable care is required. Dr. Aldridge,* however, from a series of ophthalmoscopic observations in "acute dementia," came to the following conclusions :—"The optic discs are pale, but not the brilliant pallor of atrophy; the tint of the choroid is lowered, and there is a want of that distinctness and sharpness in the picture which is such a marked feature in atrophy; in several cases the retinal vessels are small and shrunken, but no trace of previous tortuosity exists as we so often see in atrophy. In several cases of acute dementia where a very advanced stage has been attained, a certain amount of œdema of the disc, and of that portion of the retina which closely borders on it was seen," thus describing a condition which might *à priori* have been expected.

The condition of the central portions of circulatory apparatus also gives some evidence in favour of the arterial stenosis view, although it varies not only in different cases, but also at different periods in the same case. That hypertrophy of the heart occurs in a certain number of melancholiacs and lypemaniacs has been pointed out by many writers, such as Esquirol, Bayle, Calmeil, Mabille, and others, and this is certainly the condition which obtains in a certain number of the stupor cases, though the physical signs associated with simple hypertrophy are frequently only with difficulty made out during life, and after death it must be borne in mind that the mode in which most of the patients die is one directly inimical to the occurrence of such a compensatory condition, since "it is extremely important to remember that for the production of satisfactory hypertrophy, the cardiac muscle must be healthy and the conditions for its nutrition satisfactory,"† whereas the fact is that in a large number of the fatal cases of stupor the actual factors of atrophy of the heart are present, viz. : a long-continued exhausting disease such as phthisis, in which the heart is usually atrophied, and in addition, very prominently, a diminution or complete absence of bodily activity. Again, it seems probable that if there is congenital smallness of the arterial system, a congenitally small heart may be its accompaniment, a correlation known to occur. But in certain of the cases hypertrophy is a definite condition, able to be diagnosed during life, and the state of compensation of the heart at any given time seems to be a certain guide to the mental condition of the patient, the latter

* "West Riding Reports," Vol. iv.

† Byrom Bramwell, "Diseases of the Heart."

in all probability depending on the former, for when the heart begins to fail, the anæmia of the brain is certainly increased, which is then manifested by the physical expression of that condition. A good example of this is seen in the following case, in which the weight, mental condition, and cardiac state are shown in tabular form :—

E. A. M., female, æt. 20.

Month.	Weight.	Record of Mental Conditions, etc.	Cardio-Vascular Condition.
1888.	st. lb.		
March	8 8	Stupid, dull, oligoric condition ; stares at questioner ; does nothing but sit still all day ; is taking iron and aloes.	Very pale. Heart sounds very irregular ; first sound not clear ; no definite murmur ; complained of palpitation.
April	9 2	Same condition ; slightly improved at end of month.	
May	9 8	Begun to employ herself a little ; answers questions, but is silly and flighty in manner.	
June	9 7	Same condition practically.	
July	9 7	Same condition practically.	
August	9 11	Is menstruating for first time since admission ; mental condition much the same. Rather duller at actual time of menstrual flow.	
Sept.	9 11	Variable.	
Oct.	10 2	Sometimes silly and frivolous, sometimes dull and obtuse. No steady marked improvement.	
Nov.	10 6	At latter part of this month patient began to show steady and marked improvement ; works more steadily ; is less frivolous ; not dull.	
Dec.	10 7	Improvement continues ; works fairly steadily.	Heart regular ; aortic second sound much accentuated ; medio-sinistral diameter 12·5 ctm. Pulse good tension, incompressible.
1889.			
Jan.	10 5	Improvement mentally maintained.	
Feb.	10 5		
March	10 1	Mentally rather flighty, but not dull ; is not working so well as formerly. Taking digitalis and ethyl nitrite.	Heart sounds markedly irregular in force and rhythm ; first sound in mitral area "thumping," and not pure ; patient complains of palpitation.
April	10 1	Improving mentally ; works steadily, and is not so flighty.	
May	10 2	Has maintained improvement, and is discharged recovered.	Heart sounds not quite, but nearly regular ; aortic second sound accentuated ; medio-sinistral dim. 12·5 ctm. ; first sound "thumping" and dull ; pulse 60 ; tension rises rapidly.

In this case it is seen that in addition to the general pallor of face, etc., when the patient first came under observation, there was present a considerable degree of cardiac erethism, indicated by the palpitation on slight exertion or mental disturbance, combined with rapidity and great irregularity of the pulse, and probably some degree of dilatation from the somewhat impure dull first sound of the heart—in fact, just such a condition as has been described as "cardiac overstrain" by J. Seitz, and more recently by Leyden.* This condition later became considerably relieved, and, in fact, finally disappeared under appropriate treatment, giving place to a compensatory hypertrophy, with markedly accentuated aortic second sound, which was also coincident with a marked mental improvement, which again gave way at the same time as a corresponding change took place in the cardio-vascular physical signs, a condition of things rather suggesting the latter as a cause of the former. As regards the sphygmographic tracings (Dudgeon's sphygmograph) obtained in these cases there is certainly a general resemblance to such as are obtained in a case of aortic stenosis. The line of ascent is to a varying degree oblique, indicating the existence of some arterial obstruction. The height to which this line is raised is always small, which also suggests a central difficulty of propulsion. The condition of the apex varies, the tendency to form a "plateau" occurring in some cases, as has also been observed by Dr. Greenlees,† though this is not very common, and in the same case at the same time the condition may or may not be present, and perhaps may, as Dr. Byrom Bramwell‡ suggests, be due to some instrumental difficulty. If, however, this be not so, it also would suggest some obstruction to the arterial system. The condition of the line of descent varies considerably in relation to the state of the cardiac muscle, and shows the usual reaction on the administration of a nitrite in the course of the tracing. The condition of the heart after death varies, usually, however, being of small size, probably for the reasons given above, an additional reason possibly being that if the heart had responded adequately to the demands made upon it and undergone compensatory hypertrophy the case would have recovered, and a post-mortem examination, therefore, not have been made, and it is, perhaps, where this does not occur that the patient goes from bad to worse and death results. The state of the heart muscle is not by any means constant. In

* "Zeit. für Klinische Med.," Bd. xi., Heft 2 and 3, 105-166.
† "J. Mental Science," Jan., 1887.
‡ "Diseases of the Heart."

some cases there is distinct fatty degeneration of the fibres, but rarely in any marked degree. More frequently the muscle fibres are cloudy, finely granular, and the striation is as distinct; this, however, may only be a result of the mode of death of the patient. There is in some cases a considerable diminution in the transverse measurement of the individual fibres; for instance, in Case 13 a very large number of them only reached ·006 mm., the largest being ·016 mm., the normal mean being from ·015 to ·023 mm.

As regards the hereditary predisposition in these cases, further observation seems necessary, since it is rational to assume that the earlier a psychosis appears in an individual, the greater was the hereditary tendency in this direction. Crichton-Browne,* however, has said that it seldom depends on a neurotic heredity, having been only able to discover it in three out of twelve cases. In the table below the evidence of heredity as far as could be ascertained in seven unselected cases is seen, the number, however, being far too few, as are Crichton-Browne's, to form any generalization upon.

Table III.

Name.	Age on first attack.	Insane History.	History of Phthisis.	Termination.	Duration.
B. M.	21	Father's sister.	Two brothers.	Death, phthisis.	2 yrs. 9 mos.
E. A. M.	20	None	None.	Recovery.	1 year.
S. P.	17	Grandmother & mother.	None.	Death, heart.	1 yr. 5 mos.
M. W.	21	Mother's uncle.	Unascertained.	Death, phthisis.	9 yrs. 9 mos.
C. F.	22	No history	obtainable.	Death, phthisis.	16 years.
M. B.	25	Father's cousin.	Grandmother.	Death, phthisis.	1 yr. 3 mos.
B. H.	17	Aunt, cousin, and brother insane.	None.	Still under	observation.

The age at which this form of mental disease occurs is certainly that at which a congenital arterial stenosis would *à priori* appear to have most effect, that is, at an age when a great mental and bodily strain is beginning to be thrown on the organism, and, in addition, the age about which the growth of the heart,† which is most active at the age of infancy and puberty, is becoming less rapid. The importance of this point seems to be brought out by the case of S. P., in whom there

* "West Riding Reports," iv.

† Beneke, "Die Anat. Grundlagen der Constitutions-anomalieen," 1878.

was, in addition to the arterial condition, a coarse mitral lesion, so that the demand made upon the heart was presumably enormous, and also in this case the heredity was strong and direct, with the result that the psychosis appeared early, and death occurred early from heart failure. The table is also of interest from the point of view of a prognosis, which apparently may be based upon four principal points:—1st, the age at which the mental manifestation commences; 2nd, the condition of the heart and power of reaction to agents, and presence or absence of organic disease or discoverable congenital defect; 3rd, the condition of kidneys and lungs, or phthisical history; 4th, the effects of food.

Since writing the above, my attention has been directed to a table in the latest edition of Dr. Bevan Lewis's book, "On the Examination of the Brain," in which the diameters of the basal vessels are given in 45 cases of insanity. The forms of insanity, however, are not given, and I am unable to see any very low diameters recorded there.

CLINICAL NOTES AND CASES.

Fifty Years in Bethlem Hospital—The Case of "Mo." By R. Percy Smith, M.D., M.R.C.P., Bethlem Hospital.

There died recently in Bethlem Hospital an old man, commonly known as "Mo," for many years a familiar figure, well-known to all resident, and to most of those who have frequented the institution as visitors. Though there is nothing very noteworthy of late about his mental condition, yet the fact of his long residence (50 years) in Bethlem and ten years in other asylums, and in his early life his forcing himself into public notice by stopping the Queen's horse in the Park, render him interesting. Further, he left behind him a memoir headed, "The Political Fool, or the life and delusions of 'Mo,'" which shows the growth of his insanity from its commencement.

According to this memoir, the patient (Edward H.) was the illegitimate son of a merchant in St. Helena, and was born in 1807. He gives as his first recollection a great deal of talk about Buonaparte, in the year 1812. Shortly after this his father, who had become bankrupt, deserted our patient's mother, with whom E. H., however, continued to live in very straitened circumstances. He further describes the arrival of Buonaparte as a

prisoner, and it appears that shortly after this, his father left the island for England, leaving himself and sisters behind.

At the age of 13 he was sent for by his father to be educated in England, and to learn a trade, arriving in March, 1820. On the voyage home an outward-bound ship conveyed the news to them of the death of George III., and this he regarded as an omen. He next states that in 1824 he came to the conclusion that he was brought to England by God's management, to rise to royal power in this country as Napoleon had in France. He believed that at the age of 21 he would come into some property which was being kept secret from him.

This he inferred from some remarks of his father's when he was being apprenticed, to the effect that when out of his apprenticeship he should want for nothing. He seems to have gone to Doctors' Commons to search for his grandfather's will, but without much result, and then, under the idea that he was wronged, he threatened his master's life with a pistol, was sent to prison, and thence, in 1826, to the White House, Bethnal Green, as being insane. He says that his first impression there was what a number of livery servants had gone out of their minds, but that he subsequently found that the St. Pancras parish purchased old liveries as cheap clothing for their paupers. He further describes how the dirty patients were kept in crib-beds on loose straw; how others were hand-locked and leg-locked. He further states that the outcome of an inquiry into the condition of the patients resulted in the building of Hanwell Asylum. He appears to have spent five years at Bethnal Green, where his father visited him for a time, but shortly went to Australia, after which the patient heard no more of him.

In 1831 he was sent to Hanwell, where he says he went the first day it was opened; just before going there he says he wrote a letter to Lord John Russell, giving his views on the Irish question, then, as now, a burning one. He thinks the fact of his being sent to Hanwell "clearly proves there was some power behind the curtain to keep me so long in confinement."

In 1836 he was discharged, and got some employment with a builder in London. The memoir then goes on: "In this occupation I continued until my mind was so occupied with the accession of the Princess Victoria to the throne in 1837, that I suppose it took me off my feet in the path of discretion. I began to revive the ideas of my high calling to the State, which was the principal suggestion of my letters to Lord Chancellor Eldon in 1825, and I concluded that as the Princess came to the throne directly she came of age, she was intended by Divine Providence to be the medium of my political elevation, and that it was my duty to boldly and gallantly address myself to her. I took a long time to carry out my idea as Her Majesty came to the throne in 1837, and I did not write my first letter to Lord Melbourne until the autumn

of 1838, so that I was near fifteen months coming to a resolution to offer my plebean (*sic.*) hand to the young Queen, and I began to think the week I did propose so extraordinary an absurdity I should be sent back to Hanwell Asylum, but I felt it my duty to do it, and that I should be a coward under the impressions of mind that weighed upon my heart and head to care about another long restraint in a lunatic asylum. My impression was that I held the trump card of the country's salvation, and the distress that followed my last note to Lord Eldon in 1825 was intended by Providence to respond to that note."

In the autumn of 1838 he wrote his first letter to Lord Melbourne, in which he said he was about to propose himself to the Queen in marriage, and notwithstanding the ill-treatment he had received he felt it his duty to God and the country. He seems to have written several such letters under the impression that Lord Melbourne wanted him to press his suit "against all contempt." In one letter he said, "God has provided a powerful engine in the loveliness of your Majesty's person to rouse me to action." He further stated that, being a Unitarian, he would reform the Church of England from Trinitarianism to Unitarianism, though coming forward at first as belonging to the Church of England, and that he was God's elect for this purpose.

His letters not being answered he endeavoured, in the autumn of 1839, to present a petition to the Queen herself, whilst she was riding on horseback in the Park, and fell into the hands of the police. It was found that he had been at Hanwell previously and so he was sent to Bethlem by order of the Secretary of State, as a man likely to be dangerous or troublesome. He was put under Dr. Monro's care, and was eventually placed on the "Incurable" fund of the hospital.

In 1855 the following note was made: "It is very difficult to express an opinion on the state of his mind farther than that he still believes his father's words imported more than facts have fulfilled, and this probably amounts to a delusion, but one thing is certain, that from his antecedents it would be extremely difficult for him to get employment if he were at large, and so he would probably resort to an expedient similar to the former to get sustenance. He is very shrewd and intelligent, inquiring, and extremely orderly and clever, attending to portions of arrangement in his ward with all the zeal and attention of a good attendant. During the past two years he has been trusted at exhibitions in various places, and has never broken the confidence placed in him. Much might be said of qualities which render him better known than any other patient in the hospital, and tend to make him rather an officer of the establishment than a patient, but these points do not bear on any mental symptoms, and are, therefore, avoided."

Early in 1859 he petitioned the Secretary of State for his liberty, and in September of that year he left the hospital.

During the winter of 1859 he managed to live by trading in second-hand clothes with the assistance of some money he had managed to accumulate while in the hospital (hence the name "Mo"), but he failed to get on satisfactorily, spent nearly all his money, and then wrote to Lord Palmerston two or three letters, urging him to employ him as his Secretary, for he felt inspired in saying that he alone could save the country, and that he ought, in the first place, to ally himself to the Royal Family by marrying the Princess Alice. These letters were placed in the hands of Sir R. Mayne, and for some weeks he was closely watched by the police; at length it was thought desirable to place him in safety; medical certificates were procured, and he was admitted again into Bethlem. The note in the case book says: "He came here most willingly as if returning to a happy home," and two months subsequently it is noted: "He has returned with pleasure to all his old employments, and is in good health." From this time there was practically no change in his mental condition. Bethlem Hospital was his home, and appears to have been a most comfortable one to him. He was an expert billiard player, for many years acting as marker in the billiard-room. He was allowed a free pass out of the gates and a key of the male wards, and never abused his privileges.

There was no sign of mental failure which could be called dementia. He remained till quite lately the same shrewd, cunning old man, that he had seemed to be for many years. Although he never voluntarily referred to his former idea of marrying the Queen or a Princess, and it was almost impossible to get him to talk about it, yet he still believed that the country would have been better off if his advice to various Ministers in his early life had been followed. His memoir, written quite late in life, and the importance of which he much exaggerated, though it displays a very accurate memory, is rambling, and there is in it a good deal of repetition, and every now and then a long disquisition on religious, political, or scientific topics. The reflections of a patient of so much intelligence on the management of asylums cannot fail to be interesting, especially as he could remember the days before the Lunacy Act of 1845. One or two short abstracts will give his opinions: "Since the Lunacy Commissioners came into existence the public may be assured that the integrity of private asylums has been well watched by the Commissioners, and the superintendents of these private asylums have been most nervous in escaping reproof from the Commissioners and the Press, and I must take the liberty to tell the public that now not anyone is improperly confined, in fact I could write a book to show that there is not so much restraint put on men and women of unsound mind as is necessary; that a great deal of the crime that we read in newspaper reports are the results of undiscovered and unrestrained insanity."

The following sentences are of interest to those connected with Bethlem Hospital:—

"I must be thankful after all. I have had in Bethlem Hospital a very comfortable home. . . . It has been my occupation during these thirty years to mark such a succession of improvements in Bethlem Hospital that, as I told Lord Shaftesbury, I am always asking myself the question what is to be our next improvement." Upon the use of restraint he writes: "I must take the liberty to say that the old straight waistcoat that some superintendents will not have in their asylums, is the best restraint and the most proper restraint to prevent a suicidal patient from getting his hand to his wounded throat."

For some years he had been subject to gout, and latterly this had crippled his hands, but he was still able to play billiards after the completion of his eightieth year. He was also troubled with chronic bronchitis, and was eventually found to have granular kidney. Last August he had profuse and recurrent epistaxis.

In January of this year he began to have uræmic symptoms, failed to recognize his old friends, and eventually became comatose and died on the 28th of that month in his 82nd year. At the post-mortem, the kidneys were found markedly degenerated, the cortex being occupied by numerous cysts. Beyond slight opacity of the arachnoid and some excess of subarachnoid fluid, the brain was healthy, the convolutions appearing to be perfectly normal, and there was only slight atheroma of the cerebral arteries.

The case would seem to come under the heading "Primäre Verrücktheit." There was no insane inheritance known, but the patient records that his father had already had a family by another woman before he lived with E. H.'s mother, and that he again deserted her to marry someone else. In all probability the sense of being wronged began to be felt in the patient's mind at a very early age, in consequence of the straits he and his mother were in after desertion by the father about the year 1815. He seems to have been always impressed greatly by the events going on around him, such as the arrival of Napoleon and the death of George III., and also by any chance expressions, such as his father used when he was being apprenticed. With adolescence on the basis of these various impressions and no doubt after a great deal of silent cogitation, the delusions that he was persecuted and that he was destined to some great mission took root and grew, and seemed to have become firmly organized, so that he was not able to correct them. The idea that he was persecuted led him to resort to violence, and the idea of his destiny led him to address the Queen; hence his future life lay,

first, for a short time in prison, and then altogether for sixty years in asylums, with only short intervals of complete liberty. The case having developed during puberty and adolescence, it is somewhat surprising that the sexual element does not seem to have been in greater prominence. His idea of marrying the Queen does not seem to have been an erotic one, but was regarded as a political duty. He seems to have had some dislike to paying attentions to other women, his memoir mentioning that among the members of families he was introduced to by his father, there were two girls whom he thought were specially pointed out to him as desirable partners, but this probably was explicable by his readiness to pick up any chance expression; he, however, seems not to have had the slightest inclination towards them. On this subject his memoir runs thus: "I would not go there and conduct myself towards M— B— as if I was engaged to her. I never tried to bring my chair close to her, and I would leave often without shaking her hand. The truth is I was quite incapable of that gallantry which is so common in youthful spoons. I was only fit to walk into Hyde Park with some demented girl who would require from me no conversation, while my frenzied mind was occupied from earth to heaven, from heaven to earth, on plans and purposes divine." The question of masturbation in youth and adolescence in his case must remain unsolved, but possibly the absence of any sign of dementia may be explained by the absence of this exhausting habit. The ideas quoted above will be, however, recognized as those commonly associated with masturbation in adolescents. The absence of hallucinations is also noteworthy. The case appears to me to be interesting from its growth, the commencement of it taking us back to what is almost ancient history, from the long duration without dementia, and as an evidence of how a chronic lunatic may in some cases enjoy a life which at its best must have many drawbacks. I trust that this short summary of the case may interest those who have formerly held clinical appointments in Bethlem, if no one else.

A Case of Status Convulsivus vel Epilepticus. By Harrington Sainsbury, M.D. Lond., Physician to the Royal Free Hospital, Gray's Inn Road.

George R., aged 7 years, was brought to the Royal Free Hospital on May 27th, 1889, in a state of unconsciousness, which had followed one or two convulsive seizures.

The history given was as follows:—On May 17th he had been ailing; on the 19th a vesicular eruption had appeared, and on the 20th he had been brought to the out-patient department of the Royal Free Hospital. The case was diagnosed as chicken-pox, and was sent home with simple directions as to treatment. On the 24th the child was out for a short time. On the 26th he ate his dinner with a good appetite, and went out to play; soon, however, he came back, saying he was tired and felt cold; this was about 4 or 5 p.m. At 10 p.m. the child went to bed, and at 10.20 p.m. was taken with a fit, which appears to have been epileptiform in character, to have been general, and to have begun in the left leg. At 2 a.m. he had another similar fit, said to have begun in the right arm; the motions were passed during the fit.

On the 27th he appeared somewhat better during the morning, but he complained of pain in his head. About 2 p.m. he had another fit, and soon after he was brought to the hospital and admitted. He vomited shortly after admission.

In the family history there was nothing bearing on the case. The mother suffered from phthisis, also two others on the mother's side. A sister of the patient died from some lung affection. The personal history of the child was that he was a bright, eager boy (mother's estimate) till the eighteen months preceding his admission into the hospital, that he had been duller during these eighteen months; had studied hard, and would sometimes wake up at night "spelling," and that during the same period he had suffered occasionally from twitchings of the limbs, of the legs more than of the arms. For two months before admission he had suffered from a dry, hacking cough, with sweating about the forehead at night.

There was a history of the child having had a fall four and a half years previously, and having "dinted in his head." He was admitted into the Royal Free Hospital under Mr. Rose. What the symptoms were whilst in the hospital I cannot find out, but they can hardly have borne on the case, as will appear both from the history and the post-mortem results.

The child had not suffered from fits, nor were there any symptoms suggestive of petit mal.

There was no history of the passage of worms; none of ear trouble.

When seen by me on May 28th I learned that he had been

practically unconscious since admission (there had been a little moaning during the afternoon of the 27th, and the child had been able to swallow a little milk in the evening of the same day), and that there had been several convulsions, involving the whole body.

Present state, May 28th, 3 p.m.: The child was quite unconscious, and lay chiefly on the left side, with the head turned slightly towards the left, and the eyes turned slightly in the same direction. The right angle of the mouth appeared to be a little lower than the left, and the right lower lid to droop somewhat. There was some rigidity in the limbs; it was more marked on the right side, and in the legs was greater than in the arms. The abdomen was retracted.

There was occasional nystagmus; the pupils were equal and moderately dilated, and they reacted well to light.

The respirations were hurried, and there was much working of the alae nasi. This, however, was not a permanent condition, for after a fit, which came on whilst the child was being examined, the respiratory excitement became much less.

The pulse was frequent, but was quite regular.

The temperature was considerably raised.

The skin was freely perspiring, especially about the head. On physical examination some doubtful signs were discovered at the left apex.

The urine showed abundance of urates, and a small quantity of albumen.

During the examination, and apparently excited by the examination, a fit came on; the whole body was affected, first by tonic, then by clonic spasm. No definite mode of onset was observed.

In the subsequent course of the case the convulsions became very frequent, and on May 29th and 30th they occurred every ten or fifteen minutes. They would begin sometimes on the right, sometimes on the left side. In some of the earlier fits there was considerable arching of the lumbar region. The fits were easily started.

In the interparoxysmal state more or less rigidity was observed in arms or legs. At no time was there any persistent head retraction.

On May 29th the discs were examined, but nothing more than fulness of the veins was found.

On the 30th the superficial reflexes were tested, but they were not obtained.

On two occasions, immediately after a fit, oscillatory movements of the iris were seen.

Throughout the pupils remained equal, and reacted well to light, except during the fits. They were moderately dilated.

The temperature was raised continuously and considerably; the lowest point touched was 101·8°; the highest was 105·6°; the average temperature was about 103·5° to 103·8°. One half hour

after death it was 160·2°, and it was at the same height one hour after death.

The pulse varied between the extremes of 120 and 190 per minute; the respirations between 20 and 50 per minute.

The bowels were opened once and freely after the calomel purge, given on the first day of admission.

The treatment on admission consisted in the administration of a warm bath, Hydrargyrum c. creta., gr. ij., followed by calomel, gr. ij. The bowels were freely moved, but there was nothing unusual about the motions. On account of the high temperature cold sponging was tried, and subsequently the warm bath, gradually cooled down, but the effect on the temperature was not marked, and the disturbance involved seemed to aggravate the fits.

On May 30th gr. xx. of Chloral Hydrate were administered per rectum about 2.30 p.m. *One* fit only occurred subsequently. Death took place at 9.35 p.m.

The child was carefully watched after the chloral administration, but the report of the house physician was that no signs of collapse appeared, and that if any change occurred in the general state it was for the better, the colour of the child improving.

The child was of necessity fed entirely by rectum.

At the post-mortem, which was unfortunately incomplete, since permission was only obtained to open the head, the signs were absolutely negative. The membranes appeared to be quite healthy. There was no excess of fluid in the ventricles, no thrombosis of the veins; the brain substance was normal.

There are several points of interest in this case to which I would draw attention. In the first place, without implying any knowledge of the cause of the disease, the condition present may be described as a "status convulsivus," defining such state as one in which convulsive attacks follow one another in rapid succession, and are linked together by a state of coma (Bastian, Art. Convulsions, Quain's "Dictionary").

We are familiar with such "status convulsivus" in cases of uræmia, also in cases of reflex irritation, the subjects in the latter case being mostly young children or infants; puerperal eclampsia may be accompanied by such a condition, also organic brain disease. Finally, it is a recognized, though rare, mode of ending in epilepsy. Indeed, the term status epilepticus has been specially coined to describe the epileptic form of the status convulsivus. The employment of a special term here is of doubtful value, for the state in epilepsy differs in nowise from the status convulsivus, induced by other means (Bastian, *loc. cit.*).

Whenever convulsions follow each other very rapidly, no matter what their cause, the temperature will rise (Gower's "Diseases of the Nervous System," Vol. ii., p. 118), and it may

rise very considerably. In the status epilepticus temperatures of 105° and 107° have been recorded by Bourneville, and in the status convulsivus of the puerperal state temperatures of 108° and 109°. Similarly high temperatures have been recorded in uræmic convulsions. Accordingly this symptom, pyrexia, must be added to the symptoms, convulsions and coma. Profuse sweating has accompanied the status epilepticus. In the present case both the high temperature and the sweating were observed.

How may we analyze this case? We have seen that the convulsive state may be caused by a toxæmia, a reflex irritation, or a combination of these two, such as probably obtains in puerperal eclampsia, by actual brain disease (organic), and, finally, by idiopathic epilepsy, if one may use this term to denote a cause.

The first, the toxæmia, was at once eliminated by an examination of the urine; it was drawn off by catheter, and found to contain abundance of lithates, but only a trace of albumen. This trace was easily to be accounted for by the pyrexia present, even if one should disregard the frequent convulsions as a possible cause. There were no other symptoms present to suggest kidney disease. I suspect that nothing but an examination of the urine would have helped us here, for though Dr. Gowers lays stress on the absence of pyrexia as diagnostic of uræmic coma (*op. cit.*, p. 96), yet he probably does not mean this statement to apply to coma, accompanied by frequently repeated convulsions. I have already quoted his statement as to the effect of these. There is another reason why it is all important to examine the urine in possible uræmic symptoms: it is that any concurrent inflammation, *e.g.*, pneumonia, will, even in the uræmic state, raise the temperature (Gowers, *loc. cit.*), but the careful examination of chest or abdomen might prove a very difficult matter in the status convulsivus.

Was the case one of reflex irritation? I regret that this must be left undetermined, the complete examination of the body not being allowed. Against it, however, I would advance the age of the child, it having entered on the second half of childhood; the extreme severity of the symptoms, and the fact that the action of the bowels gave no clue to a disturbing element within the intestines. These arguments are, however, not conclusive, and one must accept the possibility of the causation having been reflex irritation.

I would lay more stress on the third question, Was the case one of organic brain disease? The symptoms in general were

completely negative so far as this was concerned. There was no fixed mode of onset of the convulsions, no definite residuum of rigidity or paralysis, and in the fundus of the eye nothing more than a congestion of the veins (this was not my own observation, as I had been unsuccessful in my first examination). What, however, chiefly inclined me to think intracranial mischief unlikely was a further negative symptom—the complete absence of interference with the pupil reflex. Here were present convulsions and coma—the cause, whatever its nature, was in full activity, yet there was neither inequality of pupils nor any interference with the movements of the iris, which responded actively to the influence of light. I am anxious on this point to obtain the judgment of others who have had a wider experience in nervous disease. So far as I could recall cases actually seen or gleaned from other sources, brain lesions, when they had declared themselves by *active* symptoms, and in particular, had advanced to the extent of causing coma, invariably influenced the condition of the pupils, abolishing, or, at least, rendering sluggish the reaction to light. That the symptoms in this case were rapidly established was, to my mind, an additional argument for modification of the pupil reflex, if the lesion were intracranial: the coma was almost apoplectiform in its onset.

The coma of uræmia, and also that of alcoholism, contrasted with that of cerebral lesion, are less in degree—the same holds for the coma, or rather stupor, which follows an epileptic convulsion. In keeping with this, we find that in many cases of uræmia, the pupils retain their sensitiveness to light. This appears to be the teaching at Guy's Hospital, and also that of E. Wagner ("Fagge," Vol. ii., p. 452). With regard to epilepsy, I cannot find precise statement as to the sensibility of the pupil in the stage of stupor, but, according to Reynolds, it may not be wholly insensitive, even in the clonic stage. In the stage immediately succeeding this it is described as, in general, contracted; it would thus less readily show the effect of light upon it, but inasmuch as this stage is in the direction of a return to consciousness, the inference is, I think, fair, in the absence of positive statement, that the pupil is more sensitive than in the preceding stage. The same would apply to the stupor which follows on the fit, and about which, again, I can find no definite record (see later on cases of Bourneville). It may, therefore, resolve itself simply into this: that the coma being more profound in cerebral disease than in epilepsy and uræmia, therefore the pupil reflex is more influenced in the

former. It matters not how this is put, for the state of the pupil in such case will be a measure of the coma, and the question, as a practical one, will stand: Can cerebral disease develop coma (*à fortiori,* develop it rapidly) without influencing the pupil reflex? Or, to put it in yet another way, In a given case of coma, with unaffected pupil reflex, is the disease least likely to be of cerebral origin?

Whether we have in the mechanism of the coma of cerebral disease, in which increased intracranial pressure appears to play, at least, a part, any explanation of the greater profoundness of the coma, and (if it prove so) of the greater affection of the pupil reflex, I know not.

The post-mortem showed a complete absence of disease within the cranium. The negative conclusion hazarded was therefore justified by the fact; but was the reasoning based on sound premisses?

The last question remains for consideration: Was the disease epilepsy, and was the condition present the status epilepticus? This question also must, I am afraid, be left unanswered. There had been no fits preceding the present attack; and in their absence is it possible to assert positively that the disease was epilepsy?

That the convulsions were epileptiform in character, and the whole group of symptoms typically that of the epileptic status, will not establish the nature of the case, since we know that the convulsions of uræmia and of reflex irritation may exactly resemble those of epilepsy, and that from both causes a status convulsivus may arise exactly like the status epilepticus. Whether the similarity will prove true in all details remains to be seen. Bourneville, in his "Épilepsie et Hystérie," 1876, p. 7, describes a case of the état de mal épileptique, in which, with moderate coma, the pupils were equal and *contractile,* and the vessels of the fundus oculi engorged. Bourneville and Briçon, in the "Progrès Médical" for 1887, describe on p. 243 another case of the status epilepticus, in which, together with complete unconsciousness, the pupils were equal, moderately dilated, and *contractile;* there was also nystagmus. The patient was a boy aged 16 years. These two cases are of considerable interest in connection with the previously discussed state of the pupils in epilepsy, for we may reasonably take it that the coma of the status epilepticus is deeper than the coma following a single outburst; but are these two cases typical? In our own case the pupils were quite sensitive, but we have seen that this may be the case in uræmic eclampsia, and we may ex-

pect that it will also hold for the status convulsivus of reflex irritation. Indeed, so far as the symptoms are concerned, we may expect, as Brown Séquard puts it, that "it will be almost impossible, in children especially, to say whether we have to deal with eclampsia or epilepsy. The same may be said of all kinds of attacks, of loss of consciousness, and convulsions due to a peripheric cause, whether we call the affection eclampsia or reflex epilepsy" (Quain's "Dictionary," p. 448).

I would draw attention to the oscillation of the pupils, observed on one or more occasions during the stage of recovery from a convulsive seizure. This has been described by Reynolds, Echeverria, and Clouston in epilepsy. A similar oscillation has been observed by Bastian in one case of tubercular meningitis; it has, I believe, been described by others in cases of tubercular meningitis.

There is a very mysterious connection between attacks of coma, with convulsions, and some febrile movement, especially of an infectious disease. Dr. Osler has recently drawn attention again to this question ("The Cerebral Palsies of Children," 1889). The connection is by no means an immediate outcome of the pyrexia, for the convulsive attack may follow on the recovery from the fever. Dr. Strümpell has suggested that such cases may prove the counterpart of cases of spinal anterior polio-myelitis, and be due to a polio-encephalitis of the motor areas. Such a trouble would not be likely to show itself immediately after death in a form appreciable to the naked eye. Was there such a connection here between the varicella and subsequent events? It is, of course, impossible to say, but, if so, then it is clear that there is no proportion between the violence of the convulsive attacks and the antecedent symptoms.

Case of Walter Taynton, Charged with Killing his Sister. By Geo. H. Savage, M.D.

From time to time it is worth while recording trials in which persons have been tried for crimes which might have been committed while the criminal was of unsound mind, and it seems to me that the case of Walter Taynton is one of such cases, for though there was some conflict in medical evidence, it was of small moment when compared with the ruling of the judge and the verdict of the jury. In this case a boy of 15 was charged with killing his little sister, aged 10, without sufficient, if any, cause, and the real question was whether he was to be con-

sidered insane and detained at her Majesty's pleasure, or if he should be treated as having committed murder or manslaughter and punished accordingly.

If he were insane, it seems to me to be illogical to send him to prison simply for the reason that in the one case the incarceration would be for a limited time, and in the other it would be indefinite and, as the judge suggested, it would be for life.

I had always understood that the consequences were not to be treated of by expert witnesses, that, in fact, they had to give an opinion on the facts irrespective of the result of the evidence. If this be not the aspect which we should assume in these cases, one would be inclined to say that as soon as one is called in, if opposed on principle to capital punishment, one ought to stretch every point to avoid the consequences. I have not done this hitherto, and I do not think the case under consideration will alter my action in such cases.

I shall now give some details of the case, adding the notes as supplied to me concerning the crime itself. To begin with, the boy is a very small, ugly-looking lad, with a low forehead, narrow palate, and heavy, sullen aspect. His father is a shoemaker, a steady, sober man, whose paternal uncle died in Wandsworth Asylum, and whose maternal aunt committed suicide. The mother, a delicate-looking woman, is said to be healthy in mind and body. She has heart-disease and curiously-coloured pink eyes, without being a true albino. Her father is said to have died of "paralysis and damaged brain," but it must be remembered that he was 77 at the time of his death. The boy had convulsions when only 18 months old. He was not noticed as in any way very peculiar, though very backward in walking and also in learning to speak; he could never dress himself, and up to 12 years old his mother actually had to be present when he was dressing. When old enough to go to school he was found to be very dull, especially in anything to do with figures, so that he could not be made to do the simplest sums of addition. This defect was never overcome, so that as time went on he failed at all the standards for arithmetic, and the school inspector made a special report on him, excusing him from his examinations at school as "obviously dull." He was solitary, not given to playing with his fellows; he was sullen, at times easily roused so as to strike his companions. He seemed all this time to be greatly given to reading books, but both his parents and the schoolmaster said he seemed to carry away nothing from his reading. The books selected were quite natural ones for a boy—books of travel and adven-

ture, and they were not markedly sensational, or what are generally known as bad books. He had no special aptitude, and when he left school his father wished him to take up his trade, but found him hopelessly dull, so that he could not be taught even the most elementary parts of his trade. His father did not think this was due to any special distaste to the work.* He would get away and read his books, but never entered into home-life and pleasures like the rest. He was not a bad or untruthful boy; he went to chapel and to Sunday school; he was not emotionally religious. It should be remembered that he was ugly, and that, with a big, fat nose and slight strabismus, it is not surprising that he accused the boys of making fun of him, and he is said also to have complained, rightly or wrongly, of his little sister doing the same. This was not substantiated; but I am quite willing to admit that this may have been the case for a time, and that later he passed into a state of morbid self-consciousness, in which he imagined others made these remarks.

And now as to the murder. This boy was left quietly sitting by his sister, and while alone he took up his father's hammer, which was at his feet, and struck his sister, smashing her skull in, in the most dreadful way. Then he locked the back door, which he always did when he went out, and closed the front door. He was absent for a time, returning in an hour, when he was wet from rain. The interviews with his parents are given below. In this evidence he is said to have washed his waistcoat to get rid of the stains; anyway, it was more wet than the rest of his coat, but he might have laid down. He was taken to prison, and from the first displayed no emotion; he ate and slept well, and was a good, docile boy. Though watched, there was no evidence of masturbation, and I may add that he was very fully developed for a boy of his age.

I now come to my examination of him, in July, three months after the commission of the act. He was shown into the room where the surgeon to the prison and I, with a lawyer and warder, were. He seemed very little impressed by the gravity of the questions; he was in no way nervous; he answered his questions slowly; he had a very sullen, heavy expression; his head is small, forehead low, the back of the head is the larger, the palate is narrow and high; he has a very slight external strabismus of left eye; his nose is soft and ill-formed. He was told the reason of my coming, and he did not seem to mind it. I got very little out of him beyond answers of "Yes" and "No." He could read and write; but he did

* When his father was away he would get his hammer and use it even at night.

not seem to be so hopelessly bad with figures as had been represented, as he answered several questions from the multiplication table. There were no signs of any active mental disorder in him at the time I saw him, and the warders spoke of him as being no trouble; he was said to sleep well, to be clean, truthful, and easily managed. He had not been noticed to talk to himself, or to do anything pointing to hallucinations of any of his senses; his memory was not markedly defective, though it was said to be feeble. After the interview he was taken back to his cell. I heard afterwards that Dr. Swain had two interviews with him and got much more information out of him than had any of us, or his counsel or solicitor, both as to the act and to his memory of the time preceding the crime. But there was no admission that he washed his waistcoat to remove the blood. At the trial the parents gave evidence supporting what they had already given before to the magistrates, and denied that the boy was in the habit of quarreling with his sister or with any of the family.

The schoolmaster, who had been a teacher for 32 years, and had had many hundreds of boys through his hands, said that he came forward spontaneously to give his evidence that in his belief the boy was not of sound mind; he had never met with a boy like him, so peculiar, and only once had he met with one at all like him. He said the boy was solitary, given to reading without gaining anything apparently from it, and would hide away. His mother said he would at times make the *most hideous grimaces without anyone being near him.* The master was quite unable to teach him arithmetic, and he failed at all the standards. He was not a bad boy, but defective and peculiar. I was called upon to give my opinion as to his state of mind, and said I found that he was unlike other boys, that I believed him to be defective from birth, and that I did not think he appreciated the nature of his act. I gave as reasons for my opinion the direct but distant taint of insanity and nervous disease in his ancestors, the occurrence of fits in infancy, the incapacity for learning, the sullen, solitary ways, the constant reading with little or no retention of the matter read, the utter want of appreciation of the gravity of his act, the stupid going away after the act, and the return, as it seemed, because the weather was wet and uncomfortable. Each of these symptoms was remarked upon by the judge—Lord Coleridge—as being frequent in others than the insane. He referred to the solitary reading habits of Shelley, and he pointed out the serious result, if the boy were considered insane and sent to Broadmoor.

Dr. Swain, of the Three Counties' Asylum, gave evidence to the effect that, though the boy was below the normal standard, he was not to be considered as of unsound mind. He believed that he knew the nature and quality of the act he had done. Other evidence of the same kind was given—there being after all only a very slight difference of opinion as to the degree of the want of mental development, and I consider that doctors had every right to differ as to this. The judge made a decided set, if it is not contempt of court to say so, for a verdict of manslaughter. The jury fell in with his opinion, and the boy was condemned to 10 years' penal servitude!

The whole question then is—Was it the best thing for his future to send him to gaol or to an asylum?

In any case the boy is pretty certain to end his days either as a lunatic or a confirmed criminal, and I fancy the best course has been taken to make him the latter. So society will suffer the more, and the boy himself will be none the better.

Note on Optic Nerve Atrophy preceding the Mental Symptoms of General Paralysis of the Insane. By Joseph Wiglesworth, M.D.Lond., M.R.C.P., Medical Superintendent, Rainhill Asylum. Lecturer on Mental Diseases, University College, Liverpool.

In a communication on the subject of the condition of the fundus oculi in insane individuals,* undertaken in conjunction with my friend Mr. Bickerton, we described the optic disc changes met with in a series of 66 cases of general paralysis. We showed that whilst in the majority of cases of this disease the fundus oculi presented a normal appearance, in a considerable minority changes in the direction of neuritis or atrophy were to be found, and that whilst optic atrophy was noted as a sequel of neuritis, it was also not unfrequently primary at the disc. In all the cases observed by us, however, the changes in the optic discs had developed after the mental symptoms had become apparent, although we quoted from Nettleship† a case in which optic nerve atrophy preceded the symptoms of this disease. Such cases as this latter are, in my experience, decidedly rare, and hence the following appears worthy of being placed on record:—

John M., æt. 38, was admitted into Rainhill Asylum Nov. 12,

* "Brain," 1884.

† "Ophthalmic Hospital Reports," Vol. ix., p. 178.

1887, suffering from general paralysis of the insane. He was then quite blind. An ophthalmoscopic examination made in October, 1888, showed well-marked grey atrophy of both optic discs, the vessels however, not being obviously diminished in size. The patient was then in the third stage of the disease, of which he presented a typical example. He died on Feb. 15, 1889. The autopsy was made on the following day. The brain was greatly wasted, only weighing 1,047 grammes ; the arachnoid was very opaque and stripped with difficulty, there being a large amount of decortication. Both optic nerves were much shrunken. The lungs were tuberculous. The interest of the case lies in the history. About four years ago the patient, who was a flatman, had to give up his work because he found that he was getting blind ; the blindness came on gradually without apparent cause. His wife is very positive that at that time there was nothing wrong with his mind ; indeed, the first symptoms of insanity observed by her showed themselves in November, 1887, shortly before admission into the asylum, a period of three years having thus elapsed since the first onset of the ocular trouble. Making all allowance for the probability that the mental symptoms may have existed for some time before they became apparent to his wife, this seems to be a clear case in which the optic atrophy was the primary feature. Though there is no record of any ophthalmoscopic examination at the commencement of the disease, there is little room for doubt from the history and the ophthalmoscopic appearances that the disease was atrophy from the first.

It is not often that an examination of the fundus oculi in cases of general paralysis gives us much aid in diagnosis, for the signs of the disease are usually well marked at the time that the optic changes become pronounced. But that such examination may at times furnish valuable assistance is shown both by the above case and by the following, which, though previously published,* is worth quoting here :—

A woman, æt. 26, was admitted into Rainhill Asylum suffering from violent mania which approached the acute delirious type and for a time placed her life in danger ; there was nothing whatever in the character of the mania to justify a suspicion of general paralysis. An ophthalmoscopic examination, however, disclosed complete white atrophy of the optic discs. This circumstance alone led to the diagnosis of general paralysis, a conclusion which was justified by the progress of the disorder, for in twelve months' time the patient succumbed to this disease.

Given, then, a case of primary optic nerve atrophy (for which no cause is apparent), associated with obscure mental symptoms, the probabilities are that the case will turn out to be

* "Liverpool Medico-Chirurgical Journal," July, 1887.

one of general paralysis. The chief exception to this rule would be certain cases of locomotor ataxy. Here, however, the mental symptoms are usually characteristic, these generally taking the form of well-marked delusions of suspicion and persecution, and of being acted on by unseen agencies, such delusions appearing to grow out of the sensory disorders from which the patient suffers. The two diseases—general paralysis and locomotor ataxy—are, however, as is well known, not unfrequently associated.

Paraldehyde as a Hypnotic, with Notes of a few Cases. By Morgan Finucane, M.D., Senior Assistant Medical Officer, County Asylum, Hants.

The further experience of the efficacy of the above drug as a remedy with the insane, impresses itself on one the more it is used, as I think the following cases will show.

The point that strikes one prominently is the extreme safety with which it can be administered to all classes of cases and which renders its substitution for drugs, such as chloral, opium, hyoscyamine, a great boon, especially in asylums where most of the known hypnotics are perfectly useless, unless administered in such doses as to render them dangerous to the patient, and where nearly always one has to debate as to whether such a patient's bodily state will stand drugs such as opium, chloral, etc. Paraldehyde may be given in most cases of bodily disease—chronic lung affections, kidney disease, and heart disease; in the latter producing an increased frequency and force and generally stimulating effect. For the same reason it is equally efficacious in chronic bronchitis, emphysema, and asthma. Now as to its effect upon the mental state—it readily relieves pain, it induces quiet, refreshing sleep, it allays all forms of noisy excitement and extreme restlessness, and lastly, by its continued use, it does not seem to diminish its action, nor does it require the constantly increasing dose so common with most other drugs. The drug must be given in sufficiently large doses, less than a ʒiss producing very little effect; another ʒiss may be repeated in three or four hours if necessary. The following are a variety of cases treated with the drug:—

K. O., female, age 14. Idiot.—Caries of tibia following typhoid fever, very restless and crying, frequently during the day and night; starting pains very severe at night; ʒi of paraldehyde given at bed

time; quiet sleep from ten p.m. to six a.m.; slept better the following night without draught; draught repeated subsequently with the same effect.

M. H., female, age 39.—Chronic mania with mitral disease; at times extremely troublesome, very noisy, violent, and destructive; ʒiss paraldehyde produced two hours' sleep, patient much quieter; ʒss given two hours later, patient slept through the night and much quieter following day.

M. M., female, age 30.—Melancholia with extreme restlessness and actively suicidal; no sleep at night unless induced by drugs; ʒiss paraldehyde given at ten p.m., slept quietly from eleven p.m. till five a.m.

E. E., age 58, female.—Mitral and aortic disease, senile dementia; very destructive and noisy, shouting all night. ʒiss paraldehyde given at 10.30 p.m., slept from 11 p.m. till 6.30 a.m.

J. Y., female, age 33; J. F., female, age 29.—Chronic mania; very troublesome, noisy, destructive, and violent; chloral and hyoscyamine given with scarcely any effect. ʒiss paraldehyde rendered her quiet and much more manageable, and another ʒiss repeated two hours later induced six hours' sleep; next day much quieter.

H. T., male, age 35.—"Acute mania of general paralysis." In a state of great excitement, noisy, violent, and destructive; no sleep for several nights; ʒii paraldehyde given, in two hours patient much quieter; another ʒii given in the evening, patient slept well all night.

I could quote many more such cases of the same character. The effect of the drug is quick, and in every case effectual, comparing in this respect favourably with chloral, which is often followed by little effect.

The only unfavourable feature about the drug is undoubtedly the taste and smell, which patients who use it complain of. A good vehicle for its administration is shaking the drug up with about ʒi of brandy.

Case of Raynaud's Disease following Acute Mania. Under the care of W. C. Bland, M.R.C.S., Medical Superintendent. From notes by Nathan Raw, M.B., Assistant Medical Officer, Borough Asylum, Portsmouth.

Henry C., 23, labourer, was admitted into this asylum on December 18, 1888. Has had epileptic fits since age of 13. Grandfather had fits. Fits increasing in severity during last two years. He was admitted in a state of acute mania, rolling and throwing himself about, and generally in a state of raving incoherence. He was treated in a single room, but would not stay in bed, standing for whole nights on his bare feet and shouting vigorously. This continued for eight

nights. On the 25th December his feet were noticed to be slightly swollen, but not discoloured. His mental condition considerably improved, and on the 4th January he was able to sit up near the fire. Had a relapse, however, on the 11th, and, after spending a restless night, his feet were noticed to be again swollen, and he complained of great pain. On careful examination the toes of both feet presented a bluish-purple tint, especially on the plantar aspect ; they felt cold, and there was slight cutaneous anæsthesia, patient experiencing subjective sensations of excruciating pain, referable to the anæsthetic regions. The pulsation in the tibial and dorsalis pedis arteries could scarcely be detected. There was considerable constitutional disturbance. Patient felt a sense of constriction all over his body ; intense frontal headache, with severe pain of a spasmodic character in his lumbar region and great tenderness over the region of the kidneys. In addition there were several small hæmorrhagic extravasations on his buttocks and thighs. His vision was also materially affected. He complained of dimness and inability to read. On ophthalmic examination the fundus was seen to be unusually pale, while the vessels were blanched and almost indistinct. The urine was scanty and of a very smoky appearance, specific gravity 1,028, neutral in reaction ; contained a deposit of phosphates, slight trace of albumen, and a *large quantity of blood*. Blood was also present in his expectoration. He was placed in a warm bed near the fire, and the feet carefully wrapped in cotton wool. The discoloration became more intense, and a large bleb formed under the epidermis of the plantar surface of three toes. On opening these a quantity of sanguineo-purulent fluid escaped, and a distinct line of demarcation was seen round the base of the terminal phalanges, which were gangrenous. Charcoal poultices were freely applied, and every endeavour made to check the spread of the disease. The result being that three of the terminal phalanges of the right foot, viz., second, fourth, and fifth, and one of the left foot, viz., the great toe, sloughed off, leaving a healthy granulating surface. His constitutional symptoms only lasted about a week ; the pain in the back disappeared. Blood was only observed in the urine and expectoration for three days, and then quite disappeared. Vision was perfectly restored, and the optic discs appeared normal. The toes have healed up nicely, leaving very little deformity or inconvenience to the patient.

Remarks.—The unusual occurrence of this disease, together with its association with a lesion of the nervous system, is my excuse for bringing it before the notice of the profession. Following as it did a severe attack of acute mania, with cold as an exciting local agent, the occurrence of the paroxysmal hæmaturia, impairment of vision, and severe lumbar pain, render it extremely probable that the disease was due to some central nervous lesion, causing spasmodic contraction of the

renal arteries and hæmaturia and contraction of the retinal vessels, with temporary impairment of vision. The patient has improved in his general condition, and, with the exception of occasional epileptic fits, is enjoying good health.

The Difficulty of Arriving at a Correct Diagnosis in Insane Patients. By Nathan Raw, M.B., B.S., Assistant Medical Officer, Borough Asylum, Portsmouth.

The following case well illustrates the difficulties with which asylum medical officers have to contend in the treatment of their patients for bodily disease.

Eliza S., æt. 82. Suffering from chronic mania with complete dementia. Patient was almost deaf and unable to speak, had a large scirrhus in her left breast, with small tumour, probably scirrhus, in the right breast, together with enlargement of the axillary glands. She was in very feeble health, and during the progress of the malignant disease had rapidly deteriorated; has the typical cancerous cachexia. She had for some months suffered from extreme chronic constipation, her bowels only being made to act with great difficulty, by the use of powerful aperients and occasional enemata. She was thought to be dying, and her friends had been sent for on two occasions. On the evening of the 4th February the nurse reported her to be a little changed; on seeing her she was found to be a little worse than in the morning, pulse small and quick, no elevation of temperature. It was impossible to get any information from the patient herself as to her condition; she was prescribed brandy and other stimulants, and when seen early in the morning had rallied considerably; a soap and water enema which had been given the day before only acted slightly. On the 5th patient vomited a dark, grumous-looking fluid of a sour smell, and very much resembling coffee grounds; this vomiting was thought (in the absence of other symptoms) to be due to some secondary deposit of malignant disease in the stomach. Patient had great thirst, and was given milk, brandy, and eggs. The vomiting continued at intervals, and gradually became paler in colour, but never having a fœcal smell. Patient gradually sank, and died without showing any other physical symptoms on the fourth day.

Necropsy made 48 hours after death; rigor mortis passed off; body extremely emaciated; large hard tumour firmly adherent to skin in left breast; smaller tumour in right breast; head and chest not examined. Stomach contained fluid food, dilated, walls thin; mucous membrane congested, and showing in places superficial ulceration. No morbid growth. On looking at the intestines an internal hernia of the small intestine was seen to have taken place through an open-

ing in the mesentery, causing internal strangulation of the ileum and complete obstruction. The ileum from the ileo-cœcal valve to two feet above it was quite black and almost gangrenous; walls much thickened, and lumen almost obliterated. The small intestine above was only slightly distended with gas, whilst the large intestine contained hard fæces. The margin of the opening in the mesentery formed a firm constricting band around the loop of the bowel. There were no symptoms of general peritonitis.

Remarks.—The above affords a very good example of a large number of cases occurring in asylums where the case has to be diagnosed and treated entirely upon objective symptoms, and more especially in those cases of dementia where the symptoms of inflammatory disease differ so widely from those occurring in patients with a healthy nervous system. The only symptom in this case was the vomiting, and this, in view of the presence of malignant disease of long standing, was ascribed to the stomach. Had this case occurred in ordinary practice, the surgeon would probably have been assisted by his patient in his diagnosis, and the symptoms might possibly have been relieved by abdominal section, as the constricted bowel was not far from the middle line.

OCCASIONAL NOTES OF THE QUARTER.

The Annual Meeting.

No less successful than its predecessors, the annual meeting of 1889 will be remembered as one at which the question of a separate building for curable cases of insanity formed the subject of an interesting and useful debate. The theme chosen by the President for his address was eminently appropriate, having been "in the air" for some months, and calling for the public expression of opinion on the part of members of the Association. Nothing could have been better calculated to secure this end than the able and lucid address of Dr. Hayes Newington, which deserves, and will no doubt receive, careful reading by those who were not present at the meeting. The discussion which followed will be found very fully reported in this number of the Journal. The proposals made by the President are, it is important to bear in mind, widely different from those which have been promulgated of late as likely to be adopted by the London County Council. The former may succeed, the latter

fail. A medical County Councillor, who listened to the discourse, informed us that he was thankful to the President for observations which are by no means calculated to encourage the crude notions and wild hopes recently created, and still current, in regard to the brilliant results likely to be obtained by the treatment of the insane in a sort of general hospital, having the benefit of the services of non-alienist physicians, including gynæcologists, some of whom are in danger of doing more harm than good by forgetting, as Wilson Fox once said, that "woman is not all womb." What Dr. Newington proposes is altogether different, namely, an auxiliary institution in the neighbourhood of our large asylums, but not within sight, in which curable cases should be treated for a limited period. The establishment of curable and incurable asylums is, of course, nothing new, and in Germany has been adopted with doubtful success; but the plan, as proposed by Dr. Newington, is worked out in a more definite and detailed manner than has hitherto been elaborated.

The New Lunacy Act.

The Lunacy Acts Amendment Bill, the passing of which even this year was at one time doubtful, received the Royal assent at the close of the Session, and became an Act of Parliament—to come into force May, 1890—which for good or for evil, probably both, will undoubtedly have far-reaching effects. The reference of the Bill to the Standing Committee on Law was the means of securing a calmer consideration of certain objectionable features, with the result that in some instances they were somewhat modified or entirely withdrawn. The essential principle of the Bill remained, however, unchanged. The most important concession had reference to the monstrous restrictions placed upon the admission of Single Patients into the houses of medical men, these restrictions being removed. The Medico-Psychological Association has, through its Parliamentary Committee, opposed from first to last the clause introducing these restrictions, which originally went so far as to forbid medical men to have insane patients of any description whatever in their houses. It remains to be seen how far medical men will avail themselves of the permission to have two patients in the house subject to the sanction of the Commissioners in Lunacy. As there are to be no fresh licenses for Private Asylums granted, there may in the future

be a notable increase in the number of single and, as we must now say, double, patients. In fact, there may be "more than one other." It is not a little amusing, and is surely the very irony of fate, that a Bill brought in with the avowed purpose of abolishing Private Asylums should deliberately introduce a clause, at the last moment, and under no pressure whatever from without, which restores Private Asylums to all intents and purposes, without a license, and, more important still, without the supervisory visitation required in the case of Licensed Houses. As we give in this number of the Journal an elaborate analysis of the new Act, it is unnecessary to do more than enumerate a few of its most important provisions.

A private patient is not to be confined as a lunatic without the sanction of a County Court Judge, Stipendiary Magistrate, or Justice specially appointed to grant an order. This order is obtained on petition from a relation of the alleged lunatic, accompanied by two medical certificates. If one of the above legal functionaries is satisfied, the order will be issued forthwith, but if not, he must appoint a time, not more than seven days after the presentation of the petition, for further consideration thereof. He may visit the alleged lunatic. He will have the same powers as regards summoning witnesses, etc., as if acting in the exercise of his ordinary jurisdiction. The petition is to be considered in private, and no one except the petitioner and alleged lunatic can be present without the order or permission of the judge, magistrate, or justice. These functionaries and those present are bound to keep secret all matters and documents which may come to their knowledge.

The clause relative to an urgency order enacts that a patient may be received into an asylum or as a single patient upon an order made by a relative of the alleged lunatic, accompanied by the certificate of one medical man who has examined the patient not more than two clear days previously to his admission. This order remains in force seven days.

If a magistrate has not personally examined the patient, then within 24 hours after admission, the person having charge of him must acquaint him in writing that he has a right to be examined by a magistrate other than the one who made the order, unless such person in charge states to the Lunacy Commissioners that it would be prejudicial to the patient. There will be very few instances in which it would not be prejudicial to the patient, but whether the person in charge will incur the invidious responsibility of coming between the magistrate and the patient's rights is very doubtful. It is an unfortunate provision, but is in keeping with many other objectionable

clauses which will seriously interfere with the sequestration of the patient when he requires rest and treatment.

The appointment of justices to make orders for the reception of lunatics is an important feature of the Act. These are to be appointed out of their own body and will exercise their powers for the ensuing year.

The protection of persons signing and carrying out orders, reports, and certificates is as great as could fairly be expected.

It is an obvious gain to have had it enacted that such persons shall not be liable to any civil or criminal proceedings, whether on the ground of want of jurisdiction, or on any other ground, if such persons have acted in good faith and with reasonable care.

In case an action is brought against such persons or person, such action may, upon summary application to the High Court of Justice or a Judge thereof, be stayed upon such terms as to costs and otherwise as they may think fit, provided they are satisfied there is no reasonable ground for alleging want of good faith or reasonable care.

There is no doubt that this Act will entail a considerable increase in the amount of work performed by the superintendent of asylums and the medical attendant of single patients. Thus, at the expiration of one month after the reception of a private patient, he will have to prepare and send to the Commissioners a report of such patient's mental and bodily condition, and in the case of houses licensed by justices, he will have to send a copy of this report to the Clerk of the Visitors of licensed houses in the county. Again, any reception order, whether relating to a pauper or private patient, will expire (subject to the opinion of the person in charge) at the end of one year from its date. Thereafter, if the superintendent or medical attendant certifies that the patient is still of unsound mind, his certificate remains in force for two years, and thereafter for three years, and subsequently for successive periods of five years. A superintendent will have to remember that if he detains a patient after he knows the order for reception has expired, he will be guilty of a misdemeanour.

Of the more important provisions of the Act, is one of more than doubtful wisdom, that, namely, which enacts that any person, whether a relative or not, may obtain from the Commissioners an order for the examination by two medical practitioners of any patient in an asylum or detained as a single patient. If they certify after two separate examinations with an interval of seven days between them, that he

may without risk or injury to himself or to the public be discharged, the Commissioners may order him to be discharged at the end of ten days from the date of the order. We can only hope that the reference to the Commissioners and the latitude allowed them in taking action may lessen the evil likely to be done by this clause. It is noteworthy that the discharge does not depend upon whether the patient has recovered, but upon whether he may be safely set at liberty in regard to others and himself.

Let it not escape observation that for the first time in the history of lunacy, mechanical restraint has been formally recognized by an Act of Parliament. The medical superintendents of asylums will now have legal authority for applying "*instruments and appliances*" in the treatment of patients without the doubts and misgivings they have long suffered from as to whether mechanical restraint is or is not a legitimate form of treatment. The question is now decided in the affirmative by the highest authority. A full record of every case is, of course, to be kept. Dr. Robertson, of Glasgow, has, in this Journal, commented on the painful astonishment which would have been experienced if on the occasion of the presentation of the bust of Conolly to the College of Physicians, it could have been foreseen that further experience would favour a return to a moderate use of restraint. How much greater would have been the shock if it could have been revealed to those who took part in the ceremony, that in 1889 an Act of Parliament would, at the instance of the Lord Chancellor, endorse, by legislating for, the resort to "the instruments and appliances" of mechanical restraint. To what extent this authorization of their employment will lead to their abuse, remains to be seen. Much irritation has been caused by those clauses of the Act which have reference to the letters written by patients and the notices required to be posted up in every asylum as to their rights. The former clause enacts that an asylum-superintendent and the person having charge of a single patient shall forward unopened all letters written to the Lord Chancellor, any Judge in Lunacy, a Secretary of State, a Lunacy Commissioner, the person on whose petition the order of reception was made, the person who made such order, and any visitor of the asylum, in which the patient may be. Other letters are to be forwarded at the "discretion" of the superintendent. It is not stated what he is to do with the letters which he holds back.

The clause which enacts that notices informing patients

of certain rights to which they are entitled shall be posted up in asylums receiving private patients, "so that every private patient may be able to see the same," was deleted in the Standing Committee, but restored by a large majority in the House, with, however, the neutralizing proviso that this shall be done "whenever the Commissioners in Lunacy shall so direct." The impotence of this clause is apparent when it is well known that the Commissioners do not think any such proceeding in asylums called for.

The power to deal with property of small amount is one of the good features of the Act (see Sec. 54).

So is, also, the provision for the commitment of the estate only of an alleged lunatic who is capable of managing himself, but is incapable of managing his affairs. We sincerely trust this innovation will be found to be a very useful one.

The proprietors of existing private asylums have reason to congratulate themselves, after the jeopardy in which the original Bill placed them, that they are not only left in undisturbed possession of their rights, but may have their licenses renewed to "their successors in business from time to time." No new license will be granted and no house can be licensed for a greater number of patients.

After this Act comes into operation, private patients may be received into county asylums upon such terms as the Visitors may think fit. Power is given to the Committee of Visitors of an asylum to make alterations and additions required for the accommodation of private patients—subject to the approval of a Secretary of State. Private patients may be provided with a distinct separate asylum. Asylums may be provided for idiots also. Licensed houses may be purchased, and placed under local authority.

The power to amalgamate the two lunacy departments will, we presume, be carried into effect before long.

Everyone who has the interests of the insane at heart must hope that the Act, the more important provisions of which we have briefly indicated, will prove a protection and lasting advantage to them, and that the prophecy of the late Earl of Shaftesbury as to its injurious effects will not be fulfilled. A few years' experience of the Act will determine whether the balance of results is good or bad.

Change in the Pagination of the Journal.

It has been decided to change the date at which the year of the Journal commences, and the current number will consequently close the volume for 1889. Hitherto the year began with April. Henceforth it will begin with January. There is a manifest advantage in having the first page of the yearly volume correspond to the first day of the year. Sentiment may suggest that the nature of the malady discussed in our pages renders it appropriate that the Journal should adhere to All Fools' Day; but convenience must in this instance yield to sentiment, and we feel sure that our readers will approve of the course now adopted, and which will in future be pursued. The Index for the April, July, and October issues is made up to date in the present number, and this is another change which will be more convenient, as in binding the Journal it will no longer be necessary to wait three months for the Index. The change from the Old to the New Style may cause some slight temporary confusion in those accustomed to the former, but the ultimate gain will, we are satisfied, more than compensate for this.

PART II.—REVIEWS.

Forty-third Report of the Commissioners in Lunacy.—June, 1889.

This Report again chronicles a steady increase in the numbers of persons of unsound mind under official supervision, and is in no respect less interesting than its predecessors. It has indeed this peculiar interest of its own, that it is the last Report of the Commissioners before the new Lunacy Act, which permits the re-construction of the Board, comes into force.

What influence the "Lunacy Acts Amendment Act" may have in other directions remains to be seen, but it would perhaps not be premature to predict that impossible as it is at present for six visiting Commissioners adequately to discharge the duties in relation to 85,000 insane persons, which are expected of them by a section of the public, the mass of detail and red-tapism which crowds the new Act cannot fail to make any future attempt at doing so a positive absurdity.

On the 1st of January last, the number of persons of unsound mind in England and Wales was 84,340, showing an increase during the year of 1,697, and a proportion to population of one in every 344.

The following summary shows the classification and distribution of these persons —

Where Maintained on 1st January 1889.	Private.			Pauper.			Criminal.			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
In County and Borough Asylums	396	473	869	22,863	27,846	50,709	92	24	116	23,351	28,343	51,694
In Registered Hospitals	1,767	1,582	3,349	95	66	161	1	..	1	1,863	1,648	3,511
In Licensed Houses:												
Metropolitan	834	793	1,627	378	497	875	..	..	..	1,212	1,290	2,502
Provincial	600	794	1,394	230	218	448	3	..	3	833	1,012	1,845
In Naval and Military Hospitals, and Royal India Asylum	268	21	289	..	..	..	..	..	..	268	21	289
In Criminal Lunatic Asylum (Broadmoor)	..	..	..	..	..	..	471	147	618	471	147	618
In Workhouses:												
Ordinary Workhouses.....	..	..	..	5,266	6,746	12,012	..	..	..	5,266	6,746	12,012
Metropolitan District Asylums	..	..	..	2,578	2,919	5,497	..	..	..	2,578	2,919	5,497
Private Single Patients	187	255	442	..	..	..	..	..	..	187	255	442
Out-door Paupers..	..	..	..	2,426	3,504	5,930	..	..	..	2,426	3,504	5,930
Total.....	4,052	3,918	7,970	33,836	41,796	75,632	567	171	738	38,455	45,885	84,340

The increase of 1,697 exceeded the annual average increase of the ten preceding years (1,410) by 287.

The Commissioners make the following observations with reference to these figures— :

The most remarkable fact to be noticed with reference to these figures is the increase in the year of 175 among the private patients, and of 61 among the criminals. As regards the former class this is a larger increase than has taken place since 1883; and as regards the latter it is altogether exceptional. The increase among the private patients may, to some extent, be accounted for by the additional number of patients admitted into and remaining under care and training in Idiot Establishments. These represent

probably cases never previously brought under such supervision. As regards the criminals it is entirely due to the removal of upwards of 60 insane male convicts from the hospital wards of the Woking Prison, where they were not visited by us, nor enumerated in our Tables, and their admission into Broadmoor Asylum, where they come under our official visitation.

There can be but little doubt that during the last few years many medical men have, owing to fear of litigation, refused to certify to the insanity of persons requiring care and treatment; and that this circumstance has tended to prevent many insane persons being legally dealt with and treated, thus keeping down the numbers registered as private patients. On the other hand, an increased number of persons, not quite insane, have sought and obtained admission into Registered Hospitals as voluntary boarders, some of whom, however, have been subsequently placed under orders and certificates. It is to be feared that there are still many insane persons in illegal charge, who, if certified and brought under official cognizance, would have swelled the number of private patients.

The elaborate and valuable statistical tables which are attached to the Report show that the decrease in the ratio of new cases of insanity to population, excluding transfers and the admission of idiots, which characterized the years 1885 and 1886, has been interrupted, and that the last two years have been marked by a continuance of the fluctuating, but steady, rise which had previously occurred.

That the character of the cases has been less favourable in these years may be inferred from the facts that, with one exception, the recovery rate has been lower than in any of the previous years since 1879, and the death-rate still shows a steady and progressive increase.

With reference to the ætiology of insanity, we have in this Report an interesting table which gives the proportion per cent. to the total number of patients admitted into the several classes of asylums during the ten years from 1878 to 1887 of each assigned cause of insanity, these returns being taken, not from the certificates, but from specially prepared records kept for the purpose at the request of the Commissioners.

The area investigated has been a wide one, and the results ought to possess considerable value.

This table shows the Assigned Causes of Insanity in the cases of all patients admitted into County and Borough Asylums, Registered Hospitals, Naval and Military Hospitals, State Asylums, and Licensed Houses in England and Wales during the ten years 1878 to 1887, inclusive. [The total number of

these admissions during the ten years, 1878 to 1887, was 136,478, being 66,918 of the male, and 69,560 of the female sex.] :—

CAUSES OF INSANITY.	Proportion [per Cent.] to the Total Number of Patients Admitted during the Ten Years.		
	M.	F.	T.
MORAL :			
Domestic Trouble (including loss of relatives and friends)	4·2	9·7	7·0
Adverse Circumstances (including business anxieties and pecuniary difficulties)	8·2	3·7	5·9
Mental Anxiety and "Worry" (not included under the above two heads), and Overwork	6·6	5·5	6·0
Religious Excitement	2 5	2·9	2·7
Love Affairs (including Seduction)	·7	2·5	1·6
Fright and Nervous Shock	·9	1·9	1·4
PHYSICAL:			
Intemperance, in Drink	19·8	7·2	13·4
,, Sexual	1·0	·6	·7
Venereal Disease	·8	·2	·5
Self-Abuse (Sexual)	2·1	·2	1·2
Over-Exertion	·7	·4	·5
Sunstroke	2·3	·2	1·2
Accident or Injury	5·2	1·0	3·0
Pregnancy	—	1·0	·5
Parturition and the Puerperal State	—	6 7	3·4
Lactation	—	2·2	1·1
Uterine and Ovarian Disorders	—	2·3	1·2
Puberty	·2	·6	·4
Change of Life	—	4·0	2·0
Fevers	·7	·5	·6
Privation and Starvation	1·7	2·1	1·9
Old Age	3·8	4·6	4·2
Other Bodily Diseases or Disorders	11·1	10·5	10·8
Previous Attacks	14·3	18·9	16·6
Hereditary influence ascertained	19·0	22·1	20·5
Congenital defect ascertained	5·1	3·5	4·3
Other ascertained causes	2·3	1·0	1·7
Unknown	21·3	20·1	20·7

The admissions of the year into asylums and single charge numbered 14,774, exclusive of transfers and admissions into idiot asylums, and the number of patients who were discharged as recovered was 5,720, while the deaths were 5,730.

There is, unfortunately, no table showing the causes of death; but 23 of the deaths were from suicide, and 10 from suffocation in epileptic fits.

In 3,875 instances of patients dying in asylums, post-mortem examinations were made, showing a proportion of 75·8 per cent., an increase upon preceding periods.

The recoveries in 1888 bore to the admissions the proportion of 39·04 per cent., excluding transfers; 34·48 for males and 43·21 for females.

The deaths were 10·04 per cent., 12·17 for males and 8·28 for females, of the daily average number resident.

The average weekly cost of maintenance in county and borough asylums has been in close approximation to that of the two previous years, as the following comparative table will show:—

	1886.	1887.	1888.
In County Asylums ...	8s. 7½d.	8s. 6⅞d.	8s. 6⅝d.
In Borough Asylums ...	9s. 7½d.	9s. 10¼d.	9s. 11⅝d.
In both taken together ...	8s. 9½d.	8s. 9¾d.	8s. 9⅞d.

The details of expenditure for 1888 were as follows:—

	County Asylums.			Borough Asylums.		
	£	s.	d.	£	s.	d.
Provisions (including malt liquor in ordinary diet)	0	3	5½	0	3	7⅛
Clothing	0	0	8	0	0	9½
Salaries and wages	0	2	4¼	0	2	7¾
Necessaries (*e.g.*, fuel, light, washing, &c.)	0	0	11	0	1	3⅞
Surgery and dispensary	0	0	0¾	0	0	0¾
Wines, spirits, porter	0	0	0⅝	0	0	0⅝
Charged to Maintenance Account:						
Furniture and bedding	0	0	4⅞	0	0	6⅛
Garden and Farm	0	0	6⅜	0	0	6¾
Miscellaneous	0	0	4⅝	0	0	7½
	0	8	9¾	0	10	2
Less monies received for articles, goods, and produce sold (exclusive of those consumed in the Asylum)	0	0	3⅛	0	0	2⅜
TOTAL Average Weekly cost per head	0	8	6⅝	0	9	11⅝

The Commissioners speak in terms of strong approval of the management and condition of all classes of asylums, and, with reference to those for counties and boroughs, they express a hope which will be heartily re-echoed by everyone who is interested in the well-being of the insane:—

The Local Government Act of last Session has effected a great change in the government of pauper asylums, by the transfer of the management of them from Committees of Visitors appointed by Quarter Sessions to the County Councils. We may express the hope that the future may be equally satisfactory with the past management; and that the experience of Justices who were Visitors under the expiring system may be very generally brought to the assistance of the new governing bodies.

It is satisfactory to know that in almost all instances there has been a large retention of the old members in the new Committees of county asylums, and that there is, therefore, a

prospect of their being conducted very much upon the lines which have brought them to their present satisfactory condition.

The Commissioners devote some space in their report to an analysis of the provisions relating to lunacy in the "Local Government Act, 1888," which, however, it does not seem necessary to reproduce here.

They also discuss the question of the use of restraint in the treatment of mental disease, and sum up their conclusions in the following words :—

> The employment of restraint is not forbidden, though it appears to be discouraged by the statutes in force relating to lunacy; the statutory provisions requiring a careful record to be kept, coupled with the action of this Board, had largely reduced the use of restraint; there is an almost universal consensus of opinion in this country that such restraint should be used very sparingly, and only under proper restrictions and conditions; however, we could not condemn its employment in every case, and without exception, for to do so would be adverse to the interests of the insane themselves. There would always, we consider, be some cases where restraint was necessary, and a mild form of mechanical restraint, such as gloves, sleeves, or the side arm dress was sometimes, we thought, preferable to, and less irritating than manual restraint. We expressed our disapproval of a resort to any form of mechanical restraint with a view to economy of attendants, or simply to prevent destruction of dress or bedding, and advocated frequent intermission of the restraint where employed.
>
> As regards the particular case of Bethlem Hospital, we informed your lordship that we attributed the recent increase of restraint rather to the simultaneous presence in the wards of an exceptionally large number of patients for whom restraint was deemed to be expedient, than to any deliberate change of practice, and pointed out that this hospital is chiefly devoted to the treatment of recent and acute cases, including a much larger proportion than elsewhere of excited, violent, and suicidal patients.
>
> To the foregoing views we adhere; and we think that the statutory prohibition of the employment of mechanical restraint in all but surgical cases, as has been suggested, would be unadvisable.

The Commissioners conclude their interesting Report with a reference to the recent changes which have taken place in the Board, which have been much criticised.

The Thirty-eighth Report of the Inspectors on the District, Criminal, and Private Lunatic Asylums in Ireland. Dublin, 1889.

The Report begins by stating that owing to the severe and long-protracted illness of Dr. Hatchell, the benefit of his

services was not officially available in its preparation. The infirmities of age have now necessitated resignation.

The registered insane on the 1st of January last amounted to 15,685—7,923 males and 7,762 females—a remarkably close approximation considering that the causes of mental disease vary so much in the two sexes, and only, in Dr. Nugent's opinion, to be explained by the statement that "the visitation of lunacy would seem as it were ordained to affect each alike," an explanation which, though frequently made use of to explain the difficulties which surround the origin of many human ills, yet does not appear to throw much scientific light on the subject.

Emigration, which has caused a progressive decrease of the healthy population of Ireland, has materially influenced the proportion between the sane and insane. This being the case, we must repeat our regret that again in this year's report Dr. Nugent has been unable to supply a statistical table giving a return showing the ratio of lunatics, idiots, and persons of unsound mind to the population of Ireland for each year during the last decade. He merely states that the accepted ratio of mental disease in the United Kingdom has hitherto been estimated at about 2·86 cases to every 10,000 inhabitants. What *does* this mean? The ratio for England, as given in the Commissioners' Report, amounts to 29 per 10,000 of the population, whilst in Ireland 36 to 10,000 would represent the corresponding proportion of the insane.

The following table, giving a detailed statement of the number and distribution of the registered insane in Irish institutions on the 1st of January in 1888 and in 1889 respectively, will be found of interest:—

	On 1st Jan., 1888.			On 1st Jan., 1889.			Increase.	Decrease.
	Males.	Females.	Total.	Males.	Females.	Total.		
In District Lunatic Asylums	5734	4765	10499	5888	4937	10825	326	—
In Private Lunatic Asylums	239	386	625	240	361	601	—	24
In Gaols	1	—	1	—	—	—	—	1
In Poor-houses.....	1565	2396	3961	1652	2431	4083	122	—
In Stewart's Institution	3	5	8	3	5	8	—	—
In Criminal Lunatic Asylums	140	29	169	140	28	168	—	1
Totals.....	7682	7581	15263	7923	7762	15685	448	26

During the past year the admissions to public asylums amounted to 1,513 males and 1,308 females, giving a total under treatment of 13,320. Of these 1,207 were discharged recovered, being 44 per cent. on the admissions. "Comparatively with what obtains elsewhere a highly favourable result," 556 were discharged improved, 144 removed by friends, two escaped, and 786 died, leaving on the first day of January last 5,888 males and 4,937 females resident in these institutions.

The mortality of Irish asylums is stated to have been shown from year to year in the Inspectors' annual reports to have been uniformly low in proportion to the daily number of inmates. Again, we look with disappointment to the statistics for the table, which should have borne out this statement, giving the proportion of deaths to the daily average number resident in each year for a certain series of years. We have only to be satisfied with the statement that "Last year, though a fraction above the usual, it was only $7\frac{1}{3}$ per cent., or one and a half under the average that generally obtains." The deaths were attributable to natural causes, save in four cases, which were the result of suicide, a small proportion in comparison with the number of fatalities of the kind recorded in English and Scotch Institutions.

The sanitary condition of some of the public asylums would appear to have been in a very unfavourable condition, dysentery having made its appearance in some of them, especially at the Richmond and Carlow. In the former there were ninety-six cases, of which twenty-five proved fatal; and in the latter, eleven died out of sixty-one persons attacked. The sewerage was found on examination by a new Superintendent in a most defective state, so much so as to require an outlay of £15,000 for its repair. At Carlow it would appear that not alone was the drainage imperfect, but that the supply of water was also found defective either in quantity or quality. In the other asylums the number of cases of fever and dysentery during the year amounted to ninety-seven, very few proving fatal. From these premises Dr. Nugent goes on to state—"Hence, in the absence of any other epidemic, the sanitary condition of these establishments may be regarded as highly favourable in the past year." It is difficult to understand what other epidemic Dr. Nugent would require to have shown itself in order to render a public institution in a thoroughly unsanitary condition. It might be asked—Would an epidemic of cholera fill up the required void to supply the data for an unfavourable report? Fever and dysentery include so large a number of human maladies, caused by unsanitary surroundings, that we cannot agree in

the bright view of the healthiness of Irish asylums, to say nothing of the admittedly sad condition of the Richmond and Carlow Asylums, which ought to have been long since rectified.

To the question why the pauper insane—fully three-fourths of whom in Irish asylums are said to be incurable—should require more costly institutions, both in structure and maintenance, than is considered necessary for ordinary paupers, the following answers are given :—

Firstly.—Paupers are free agents, enjoy liberty, and when suffering bodily disease, hospitals are open to them. The insane labour under an exceptional malady, and are in consequence deprived of social rights and personal freedom, not alone for their own protection, but equally for the safety of society, and being limited to an extremely small percentage in the population at large, their support comes within a definite and very narrow expenditure. Secondly.—With respect to the treatment of presumably curable cases, the special facilities provided by fully organized institutions are admittedly essential ; while as regards the more dubious forms of the disease, including the hopeless, similar facilities are alike necessary in the case of such as may have exhibited violent or suicidal tendencies. Then as to the large and increasing residue, or those whose insanity, though incurable, is of a harmless character, there are very many among them who from their helplessness and absolute incapacity of making any spontaneous effort to better their condition, though sensible of it, should not, in our estimation and in accordance with an enlightened public opinion, be deprived of the accustomed care afforded in establishments specially designed and maintained for such a purpose.

Moreover, it should be borne in mind that insanity being an affection more or less of a progressive tendency, its extension should be provided against as a State requirement for the public weal.

Dr. Nugent, in referring to the various forms in use in Ireland for the admission of pauper patients to public asylums, is of opinion that although magisterial warrants, under the Dangerous Lunatic Act, may be considered unsatisfactory, they afford one paramount advantage, viz., the quick transmission of the insane by the police. And he adds, that the irksome duty of escorting lunatics is performed with marked kindness by the constabulary, particularly where females are in question.

The expenditure in Irish asylums during the year 1888 amounted to £219,585, or at an average rate of £20 10s. 10d. per head per annum, varying in different asylums from £16 2s. 4d. to £23 18s. 8d. The contributions for the support of these institutions are made up of £103,996 from Government, and £115,389 from the local rates. It would, therefore, appear that almost one half of the money for the support of Irish asylums is derived from the Government grant. In fact, in

those institutions where the annual cost is reduced to £16 per annum, the rate in aid must cover nearly two-thirds of the expenditure, a result not intended when the grant was made, the intention in giving it being to improve the condition of the insane, rather than to lessen in such a very large proportion local contribution. To reduce the maintenance of the insane to such a low rate (about 6s. 6d. per week) must necessitate a scale of food and clothing below that of an ordinary workhouse, as it must be remembered that in Ireland this sum has to cover the total cost of the establishment, the wages and maintenance of the staff, repairs and minor alterations, furniture and bedding. The loans obtained from the Commissioners of Control being granted only for the purpose of erecting new buildings, or for carrying out very extensive structural alterations—no source of income exists to correspond with the county account in English public asylums.

In giving a return of the amount still due to the Government for loans made for the erection and enlargement of public asylums, it is pointed out that the accommodation provided in them is not nearly sufficient for the numbers applying for admission. So great is the overcrowding that day-rooms and corridors have to be used as dormitories. The institutions, where the deficiency of accommodation is most felt, are the three largest, viz., the Richmond, Cork, and Belfast. The quantity of land belonging to Irish asylums is stated to amount to 990 acres, and although new purchases are in prospect, this would scarcely appear adequate for the employment of the number of the agricultural insane at present resident in these institutions, as, deducting the number of acres occupied by buildings, airing courts, etc., amounting to 294, the remainder would only allow one acre to sixteen patients.

The general treatment of the insane in these institutions is spoken of in the highest terms. Every kindly attention, as a rule, is bestowed on them, the clothing is good, the dormitories fully supplied with good bedding, improvements are being made in the day-rooms and corridors,—amusements of various kinds are provided, such as music, dancing, and exhibitions. Dr. Nugent, however, does not speak in the same high terms of the dietary provided, which he states is not uniform, more animal food being given in some institutions than in others. This, however, in his opinion, is a matter which more properly pertains to District Boards.

The conduct of the subordinate staffs is again spoken of as commendable during the past year, "and admits of a favourable comparison with that in kindred institutions, as would

appear from published Parliamentary reports; it may be, then, permissible to observe that out of 1,079 servants employed in 1888, three only were dismissed by Board orders for violence, culpable neglect of duty, or for any indictable act."

We have only to repeat, with reference to these remarks, that before a comparison can be made between the conduct of Irish attendants on the insane, and that of officials holding similar appointments in other countries, it will be necessary that they should hold office on an equal footing, viz., that they should be selected and dismissed by the Medical Superintendents, the responsible officers of these institutions. Until the heads of asylums are given the selection of their own officials, it is useless to suppose that they can be held responsible for their conduct. The natural explanation, therefore, of the small number of dismissals of attendants from Irish asylums which will present itself to the minds of those who are conversant with the management of these institutions, will be that the Medical Superintendents have not the power of getting rid of the unsuitable members of their staff, and will not place themselves in the position of bringing charges against their subordinates before Boards of Governors, by whom they may, *or may not*, be supported.

Irish poorhouses are said to contain 4,083 lunatics. These are classified as cases of idiocy and dementia, of whom a large number are epileptic. The description of the mental state of these insane inmates of workhouses must be given in Dr. Nugent's own words. The sentence is slightly involved.

> The majority of both divisions are tranquil, and have been resident for many years past—in fact, 1,326 for over thirty; most of whom, and, indeed, no inconsiderable section of the body at large, are quite devoid of intelligence. And thus, not protected by instinct, which stands for reason in the lower grades of animal life, they are reduced, as it were, to a passive existence, with a total disregard of surrounding circumstances. Lunatics, however wild in their demeanour, or teeming with delusions, habitually complain of their detention and the loss of liberty, but scarcely ever have I been asked by the idiotic or demented inmates of a poorhouse to obtain for them that freedom, love of which is an innate attribute of the human mind; hence, not a less—perhaps it may be a greater—claim, the unhappy classes in question possess on their more fortunate fellow-beings for commiseration, as alike created from the same image.

The accommodation provided in the various unions throughout Ireland is then described. In many of the more important workhouses, where a large number of lunatics are collected,

their condition is said to be most unsatisfactory, and deficient in all those requirements which not alone medical science, but modern civilization, demands for these helpless human beings.

In the North Dublin Union, for instance —

"A narrow, single-storied building, cramped in by high walls on one side, and an elevated structure on the other, contains double-bedded cells, which do not afford 340 cubic feet to each patient, with no available corridor, and no adequate supply of air, the only aperture in the cells themselves for light and ventilation being windows not fifteen inches in diameter. At the South Dublin Union there is scarcely an acre of available exercise ground for over 200 patients. At the Cork poorhouse the day-room provision is cheerless and deficient. An ill-constructed detached shed, quite unfurnished, exposed to bad weather at all seasons, and not sufficiently spacious for one-half the number, is now the only available apartment for over a hundred and twenty women. The male lunatic division is far too small, and, no matter how great the pressure, the occupation by two lunatic idiots or epileptics of the one bed is most objectionable."

To remedy the existing condition of these institutions the Inspectors have advised, in previous reports, the setting apart of one or more poorhouses in each district, so arranged as to accommodate the aged hopeless and tranquil cases. Also, with the view of saving expense in erecting new asylums and enlarging the old, and to avoid uncalled-for expense in the maintenance of this class of the insane, the report goes on to state that "the Inspectors have invariably endeavoured, while most anxious for the welfare of the lunatic poor, to limit local taxation as much as possible, and, at the same time, to keep the Government rate in aid within certain legitimate limits as a security for its continuance."

As to the wisdom of the plan suggested by the Inspectors, were we to give any opinion, we should certainly say, taking into consideration the details given of the condition of the insane inmates of the Irish Workhouses, that the "limitation of local taxation" was the last thing needed; that, on the contrary, a liberal measure for the amelioration of the accommodation provided for these shamefully neglected human beings was most urgently called for.

Thirty-first Annual Report of the General Board of Commissioners in Lunacy for Scotland. Edinburgh, 1889.

The figures in this report indicate a continuance of the steady increase in Scotland in the total number of persons

of unsound mind coming under the official cognizance of the Commissioners in Lunacy. On January 1st, 1888, the total was 11,609, and on January 1st, 1889, it was 11,954, an increase in all of 345. The increase of *registered* lunatics, excluding inmates of training schools and of the general prison, during the year was 335, as compared with 304 in the preceding year, and the proportion per 10,000 of population rose from 28·4 to 28·9. This last figure is not far removed from that which applies to England, where the proportion is 29·07.

An increase has taken place during 1888 of 85 private and 182 pauper patients in royal and district asylums, of 10 private patients in private asylums, of 33 pauper patients in parochial asylums, of five in the general prison, of two private and three pauper patients in training schools, and of 27 pauper patients in private dwellings, while a decrease of one private patient has taken place in private dwellings, and of one pauper patient in the lunatic wards of workhouses.

Taking establishments first, we find that the number of private patients admitted during the year, exclusive of transfers, was 519, or 18 more than during the preceding year, and 69 more than the average for the quinquennium 1880-84, and that the number of pauper patients admitted was 2,095, 98 more than the preceding year, and 35 more than the average for the five years 1880-84. Fifty-five voluntary boarders were admitted during 1888, being three above the average admissions for the decennium 1879-88, and the total number of these resident on January 1st, 1889, was 44.

Of those who were discharged recovered 183 were private patients, and 944 pauper patients, these numbers being respectively one and 38 below the average for the quinquennium 1880-84. The recovery rate per cent. of the admissions is given in the following table :—

Classes of Establishments.	Recoveries per cent. of Admissions.				
	1880 to 1884.	1885.	1886.	1887.	1888.
In Royal and District Asylums ...	41	37	42	40	38
„ Private Asylums	38	50	26	27	25
„ Parochial Asylums	42	41	44	39	45
„ Lunatic Wards of Poorhouses...	6	7	6	6	7

The number of private patients who died in establishments was two more than the average for the five years 1880-84, and of pauper patients 47 more than the average for the same period. The death rate for private and pauper patients per cent. of the average number resident for the years 1885 to 1888, and the corresponding averages for the quinquennium 1880-84, is shown in the subjoined table:—

Classes of Patients.	Death-rates in all Classes of Establishments per cent. of the Number Resident.				
	1880-84.	1885.	1886.	1887.	1888.
Private Patients	7·0	8·0	6·7	5·8	6·4
Pauper Patients	8·1	8·1	7·9	8·1	8·1

The number of escapes during the year was 207, which is below the average proportion of the last 10 years. Few of those not retaken during the statutory period, it is stated, are permanently lost sight of, and some remain at large, from being found to have recovered or to be in a state not justifying their being detained in an asylum.

As regards accidents, the whole number was 95, of which nine ended fatally, four of these being cases of suicide. In 40 cases the accident involved fracture of bones or dislocation of joints, 23 of which were occasioned by falls, three by assaults by fellow-patients, and six by struggling with fellow-patients or attendants. One of the fatal casualties, which occurred in a royal asylum, was believed to be a homicide of one patient by another, and another of the serious accidents was the self-inflicted total destruction of both eyes by a male patient resident in a parochial asylum, in obedience to a voice which he believed he heard ordering him to do so.

The table referring to the progressive history of patients first admitted in the year 1868 is again given, and in it 12 patients are figured as having recovered in 1888, but on the following page we find it stated that these were all recent re-admissions, eight in 1888, three in 1887, and one in 1886.

There is only one point as regards the entries of restraint and seclusion which seems to us to call for comment. In one of the Commissioners' entries as regards the condition of Gartnavel, Dr. Yellowlees is credited with having employed

restraint 62 times in the case of one patient between January and August. This unusually high record of restraint led us to make inquiry, and we learn that there is an unfortunate error in the report, the word "restraint" having been substituted for "seclusion." The patient was not restrained, but was secluded on each of these occasions for exceptional and obscene violence.

The royal and district asylums, and the Larbert Training School are again spoken of in very favourable terms. The first-mentioned in particular appear to be doing much good work in the direction of providing accommodation for persons who are in more or less straitened circumstances and unable to pay other than low rates of board, though, in the opinion of the Commissioners, all will not have been done that ought to be or can be done in this direction until all patients for whom rates of board of not more than £25 a year can be paid are provided for in these institutions as private patients.

An analysis of the table appended to this notice giving the number of lunatics at January 1st, 1889, shows that, as regards pauper patients, the distribution is as follows: 68·3 per cent. are resident in asylums (royal, district, and parochial) and training schools, 8·8 per cent. in workhouses, and 22·9 in private dwellings. Comparing these figures with the corresponding ones for England, we find that the proportion of boarded-out pauper patients is nearly three times greater in Scotland, but there is one fact regarding the distribution of pauper patients on this side of the Tweed which we have not seen referred to, and which appears to us sufficiently striking to merit mention, viz., the relatively large proportion boarded-out in Wales. The following tabular statement shows the relative distribution in these three divisions of the kingdom:—

	In asylums, etc.	In workhouses.	In private dwellings.
England ...	69·3	23·7	7·0
Scotland ...	68·3	8·8	22·9
Wales ...	61·7	12·9	25·4

Wales would therefore seem to be in some way peculiarly adapted for such a method of disposing of harmless and incurable pauper patients, much more so than England proper, and more so even than Scotland, and this in spite of the fact that the Capitation Grant is not, as in Scotland, available in the case of patients maintained outside of

Number of Lunatics at 1st January, 1889.

Mode of Distribution.	Male.	Female.	Total.	Private.			Pauper.		
				M.	F.	T.	M.	F.	T.
In Royal and District Asylums	3282	3425	6707	711	767	1478	2571	2658	5229
,, Private Asylums	48	110	158	48	110	158	...	...	...
,, Parochial Asylums, *i.e.*, Lunatic Wards of Poorhouses with unrestricted Licenses	705	788	1493	...	...	...	705	788	1493
,, Lunatic Wards of Poorhouses with restricted Licenses	445	433	878	...	...	...	445	433	878
,, Private Dwellings...	936	1492	2428	42	89	131	894	1403	2297
	5416	6248	11664	801	966	1767	4615	5282	9897
,, Lunatic Department of General Prison	45	12	57	...	...	...	...	...	...
,, Training Schools	151	82	233	79	47	126	72	35	107
Totals	5612	6342	11954	880	1013	1893	4687	5317	10004

asylums and that there is on that account a very great inducement to send pauper patients to asylums rather than elsewhere, and very little inducement to remove such as have ceased to require asylum treatment. Any great extension of boarding-out, so long as the Capitation Grant is withheld, is hardly to be looked for in England, nor, until better provision is made for the proper supervision of lunatics boarded out, would it, we think, be advisable.

The increase of 27 in the number of pauper patients in private dwellings is small, compared with that of the preceding year, which was 130, or with the average for the last three years. It has not, however, "been due to the special action of the authorities of two or three parishes, as has been the case as regards the increase of years immediately preceding." In only six counties has there been an appreciable decrease.

Table III., p. 3, of the Report shows that the proportion per 100,000 of population of pauper lunatics in private dwellings has during the past 10 years shown a steady upward tendency, the proportion in 1880 being 39, and in 1889, 57. Dr. Lawson, however, is of opinion that, while, so far as geographical area is concerned there is yet room for a considerable extension of the system, there seems reason to doubt whether it will be much more generally employed by rural parishes which appear to have reached the average which they can conveniently provide for, and that, as regards the majority of the larger urban parishes, the probability is that they have now reached the proportion of patients for whom domestic care is adequate and suitable. Aberdeen appears to be the only city which does not to any extent take advantage of the boarding-out system, and Dr. Lawson hopes that the next marked addition may be brought about by its adoption of the method.

Clinical and Therapeutical Researches in Epilepsy, Hysteria, and in Idiocy. By Drs. Bourneville, Sollier, Pilliet, Raoult, and Briçon. "Publications du Progrès Médical," Paris, 1888.

Amongst the above we find a very interesting treatise on epilepsia procursiva, to borrow a term employed by the older writers on epilepsy. This form of epilepsy is characterized by the act of running as an essential feature. This act, however,

may occupy, as it were, a different position in the epileptic attack, and accordingly there arise different varieties of epilepsia procursiva. In the first of these the act of running virtually constitutes the whole of the attack; in a second variety the running may take the place of an epileptic aura, and be followed by an ordinary attack of the grand mal; in a third form the running is consecutive to an ordinary epileptic seizure.

The running may take place in a straight line, or in larger or smaller circuit, and during the act the patient may be able to avoid obstacles lying in his path. Three cases of the first form are recorded. In one of these there was witnessed an interesting evolution of the disease, which first appeared as attacks of loss of consciousnesss (simply absences), then as attacks of vertigo, and finally as running seizures. Occasionally in this case the running would be cut short by convulsions, but in general it constituted the whole of the attack.

Two cases with "procursive" aura are recorded, one with an autopsy, and two cases in which the running followed the attack of epilepsy.

Drs. Bourneville and Briçon draw the line sharply between these acts of running and the automatic movements which are frequently observed in connection with epileptic seizures. These automatic acts are but the "unconscious repetition of simple acts which are daily gone through." They are most commonly seen after the regular seizures.

The authors observed in one post-mortem on a case of epilepsia procursiva a lesion of the cerebellum, atrophy and sclerosis of the left hemisphere, and apparently in this case the lesion was the oldest one present. In another case the cerebellum was affected, but it was only slightly.

The connection between cerebellar lesions and forced movements is sufficiently established to make these records, scanty though they be, of much interest. Naturally pathology must wait, and wait patiently, for further evidence, for the cases of epilepsia procursiva are in themselves rare, the post-mortems still rarer.

There are other articles of interest in this volume—two cases of double athetosis with imbecility, anomalous formation of the genital organs among epileptics and idiots, observations on the dentition of idiots, etc.

The Exciting Causes of Hysteria. By Georges Guinon, 1889. "Publications du Progrès Médical."

Hysteria is becoming, or has become, so fashionable that no medical education can be considered complete without some knowledge of this most strange disease. It is no longer possible to present one's self before the College of Surgeons and to pass in medicine on the grounds of an accurate acquaintance with human parasites; it is also necessary to know something about hysteria. Dr. Guinon's work deals with the exciting causes of hysteria, and at first sight it may seem that a volume of nearly 400 pages is hardly required on so restricted a theme; but it must be admitted, on closer examination of the work, that Dr. Guinon presents us here with a serious contribution to medical literature. The book is well written, and is the result of much careful labour; withal it shows abundant evidence of that which is absolutely essential when dealing with such a subject, viz., common sense. The author is careful to maintain that the long list of causes he presents to us are causes which excite only, but which do not create the disease; the tendency must be already there. Wisely, he does not pretend that the list is a complete one, or that it is capable of completeness; but at the same time the etiology given is sufficiently extensive to prepare the mind for other possible causes. Hysteria as the result of emotional disturbance we are most familiar with, whether this depend on actual education such as nursemaids are in the habit of imparting to their charges, on what may be termed the bogey-system, or on unconscious imitation, such as befalls, in particular, the young and growing mind, or on sudden and violent shocks. We are less familiar with hysteria brought into activity by certain general diseases, such as typhoid fever, pneumonia, scarlatina, acute rheumatism, or by more chronic affections, such as diabetes mellitus, malaria, syphilis, or, again, by certain intoxications, such as lead poisoning, or poisoning by alcohol, mercury, sulphide of carbon, etc. Reflex irritation, and, in particular, such as results from diseases of the organs of generation—or even from the physiological activities of these same, as, for instance, in pregnancy and in the lying-in state—for such exciting causes we are prepared; but, again, we are less prepared to look for exciting causes among such diseases as disseminated sclerosis, tabes dorsalis, Friedrich's disease, Pott's disease, etc.

According to the author, hysteria may be found in con-

junction with other forms of neurosis, and in particular with neurasthenia, from which disease hysteria is to be strictly differentiated.

The several causes above mentioned, whilst *occasional* only, the essential stamp of exciting causes, may yet impress characteristics of their own upon the form of hysteria which is developed. The true predisposing cause of hysteria is to be found in heredity.

Numerous cases in illustration of the views of the author are given.

We are glad to see that the author speaks very strongly on the relation between hysteria and hypnotism. He regards hypnotic suggestion as an exciting cause of hysteria, and he holds that we are not justified in employing such in the treatment of any cases of hysteria, except those which are of the most aggravated type—*i.e.*, cannot be rendered worse. He gives cases in illustration of this view, cases in which, as the result of hypnotic treatment, slight hysterical symptoms have given way to severe hystero-epileptic symptoms. We are also very glad to find that Prof. Charcot is equally emphatic in the same direction. This part of the book we would especially commend to our readers.

Der Hypnotismus. By Dr. Albert Moll. Berlin, 1889. 8vo. pp. 279.

In the history of the advance of knowledge in new subjects it is always a time worthy of note when the scattered essays and writings begin to be gathered together and moulded into text-books. A firmer basis is secured by the comparative study of results, and conclusions that have been arrived at almost independently, in many countries and under very varied conditions gain very greatly in weight by combination when they are found to be substantially in agreement. The study of Hypnotism has reached this point, and Dr. Moll, of Berlin, has presented us with a text-book that is an almost encyclopædic epitome. It serves as an excellent introduction to this many-sided subject, for it does not pass by in complete neglect any of the theories, observations, and experiments that are gradually attracting the attention of the psychological as well as the medical world, as has been so well shown by the first meeting of an International Congress of Physiological Psychology at Paris this summer. How wide is

the extent of the literature of the observers concerned may be gathered from the careful index Moll has made of the authors he quotes. These amount in all to 463; of whom 153 are French, 131 German, 40 English, and 26 Italian. The large majority consist of living writers, a few philosophic, but mostly medical; and with them a few of the elder authors are included, some of whom, certainly, were not specialists, such as Aristotle, Voltaire, Goethe, and Sir Walter Scott. Moll, in fact, is well able to see that the facts of Hypnotism did not begin in this century, when Braid, in 1843, brought the word into use, still less in 1878 when Charcot began his experiments, and that there are deeper questions underlying it than can be disposed of either in a hospital or a physiological laboratory. His historical introduction is too condensed to admit of discussion of the many difficult points that are involved, but it is on the whole accurate, of wide range, and a marked contrast to the scanty and narrow retrospect that is prefixed to several of the better French treatises. He does not mention Dr. Esdaile of Calcutta in the preliminary pages of history, though he recognizes candidly in a later passage (p. 224) the importance of his results in successfully producing complete anæsthesia by hypnotism alone in a series of 261 major surgical operations begun in India in 1845, before any other anæsthetic had been introduced there, and continued in a hospital put at his disposal by the Government after due investigation of the honesty of his results. He gives due credit to the patient and toilsome work of Liébeault in the experimental therapeutics of hypnotism, which began about 1860, and after more than 20 years of some contempt and neglect, stimulated Bernheim, Beaunis, Liégeois and the active spirits of Nancy to give attention to the matter, and ultimately to establish a school of European reputation. In England he does not forget the work of Elliotson before Braid, and of Dr. Hack Tuke in 1865 and more recently; while the many references to Gurney's writings and experiments show him to be acquainted also with the deeper study of the possible bearings of newly-recognized facts.

The general plan of the book is clear and consistent. It is an epitome of the present knowledge, and not an attempt at an independent view of the subject, or merely a guide to the therapeutical uses of hypnotism. After his historical remarks, Moll discusses "Hypnosis," as he phrases it, *i.e.*, the method or process of inducing the state of hypnotism. It may consist in gazing fixedly at something held in the hand, as was practised by Braid; in receiving the simple order to sleep, such

as is used at Nancy and elsewhere; or in having "passes" made over the subject, such as the physiologists have been accustomed to describe as monotonous stimulation, in which it is very possible that expectant attention and suggestion have had a part. Then, as to the stages or degrees of hypnotism, Moll sees clearly enough that when a sufficiently wide survey of facts is taken, it is found that different symptoms and different sequences of symptoms belong to different places and operators, and the differences are probably due to the different wishes, expectations, and unconscious suggestions of both operators and subjects, rather than to any strict physiological necessities. The Salpêtrière School have established in their patients the three stages of catalepsy, lethargy, and somnambulism, and these stages have accompanied the pupils of that school when they practised elsewhere than in Paris; but in the practise of others, who have not been trained to expect them, the character and sequence of the symptoms have been different, and these three stages ill-marked or absent. As a matter of fact, the extreme complexity of the symptoms, in this comparatively novel field of observation, makes both classification and theory out of place, except as temporary points of view from which to observe some new facts, or perhaps we should rather say some old facts in a new light. The theories of explanation of the hypnotic facts have, as Moll says, generally ended in explaining the unknown by the unknown. Of the symptoms, or facts of hypnotism, as described by many persons in many lands, Moll next gives us a careful *résumé*. It is full of references to the original authorities, quoted by name only, and this, along with the excellent bibliography of Max Dessoir ("Bibliographie des Modernen Hypnotismus," Berlin, 1888), from which may be gathered the titles of the books and articles referred to by Moll, offers an opportunity to anyone who cares to acquaint himself thoroughly with the subject, such as hitherto has been not easily available, and should now not be neglected. The accurate description of the physiological details has not stood in the way of a good sketch of the chief psychological points, such as the ready evocation in some hypnotizable subjects of a hypnotic self, with possibly different character and memories, completely separate from the old self, generally quite dormant in normal life, but occasionally roused to action by a suggestion given in hypnotism and carried out in normal life, or sometimes showing itself unexpectedly in automatic writing. Moll has no low estimate of the power of suggestion; "a suggestion," as he says, "in a hypnotized

subject is as firmly rooted as a dogma in a devout Catholic" (p. 202), but he is also aware that it may not explain everything, and he discusses the experiments that have been carefully devised by Charles Richet, Pierre Janet, Guthrie, von Schrenck-Notzing, Gurney, and others, to exclude suggestion and fraud, and in which a telepathy, without suggestion, has been claimed to have been obtained, and frankly expresses his sense of the importance of the claim, and his thanks to the investigators. The book is one which deserves to be read, and, even more, to be translated.

A. T. Myers, M.D.

De quelques Erreurs sur la Folie nées des Doctrines Psychologiques. Par le Dr. Victor Parant, 1889.

A thoughtful article in the *Memoires de l'Academie des Sciences, inscriptions et belles-lettres de Toulouse* (tome xi.), by Dr. Parant, of Toulouse, nephew of the lamented Achille Foville, will repay the reader of French journals. The writer endeavours to show that great as is the debt of gratitude of all alienists to Pinel and Esquirol, Psychological Medicine has suffered from their having adopted, as the basis of the study of insanity, the systems of Locke and Condillac. Impregnated with the ideas of these philosophers, Pinel believed that they ought to be applied to the study of mental disorders. He practised this not only himself, but counselled all who would study them to do the same. He taught that the knowledge acquired respecting human passions and the modifications of thought should lead up to that of mental alienation. He considered spasmodic passions, weakening and oppressive passions, gay or infantile passions, and he undertook to show that from their excess and irregularity, insanity nearly always proceeds. He had little to say about heredity. He gave an almost exclusive value to lesions of thought, memory, association of ideas, etc., but that which is essential to the science of mental maladies, the knowledge of the organic changes on which mental disorders depend, Pinel relegated, according to M. Parant, to a secondary class. Into this error he drew his pupils, and those who at that period studied the subject.

Esquirol followed in the same groove, and emphasized the errors of his master. The very title of his inaugural thesis showed this, namely, "Des passions considérées comme causes, symptômes, et moyens curatifs de l'aliénation

mentale" (Paris, 1805). The course pursued by Esquirol is worked out in much detail by the author.

Granting these fundamental mistakes, however, it must not be forgotten that these physicians did not overlook the clinical observation of the insane. They were the true founders of what is now known, far and wide, as the School of the Salpêtrière.

The special results of the metaphysical teaching of Pinel and Esquirol are considered and enumerated with much ability by M. Parant, but our space will not allow of our giving them. For these we must refer the reader to the original article.

The Treatment of Inebriety in the Higher and Educated Classes. By James Stewart, B.A., M.R.C.P.Ed. H. K. Lewis, London, 1889.

The writer of this pamphlet, which is a paper read before the Society for the Study of Inebriety, in London, does not claim any credit for originality as regards his method of dealing with the inebriates of the cultured classes who submit themselves to his treatment. His apology for publishing his paper is that he has been often asked by medical men for something not too technical or cumbersome to put into the hands of intelligent patients who suffer from the "drink crave."

Dr. Stewart appears anxious to put prominently forward the conviction, which has forced itself on his mind, that much mischief has been done from confounding drunkenness with inebriety, the former being a vice, the latter a disease. We had better, however, give his summary in his own words, and leave it with the reader.

(1) Drunkenness and inebriety ought not to be confounded.

(2) Inebriety is a lesion of the brain which has gone so far as to affect the will-power.

(3) Successful treatment based on this pathological dictum must include the absolute cessation of alcoholic drinking.

(4) There is no danger in the sudden and complete withdrawal of alcohol, if the case—no matter how severe—be in the hands of a skilful physician able to personally direct the hourly treatment from the first.

(5) The physician undertaking the charge of such cases ought to be a total abstainer, as well as everyone living under his roof, so that moral treatment by example may supplement therapeutic remedies.

(6) Permanent recovery need not be hoped for unless both lines of treatment be pursued, systematically, during an uninterrupted period of twelve months in a "Home" from which every beverage containing the smallest quantity of alcohol is absolutely excluded. The first four months barely suffice for the getting rid of the stomach and other troubles which are the result of the alcoholic poison; at the end of the second period of four months, the patient begins to feel less the want of alcohol; by the end of the third period he has begun perhaps to understand that life may be enjoyed and vigorous health secured without stimulants.

(7) So-called "cures" effected by bark, strychnine, iron, and other drugs have not proved permanent.

(8) The permanence of a cure depends greatly on the after-treatment pursued subsequently to the patient leaving the "Home." The family of the inebriate, or the household of which he or she is to form a part, ought all to become total abstainers, no alcohol being allowed under any circumstances into the house except as a drug prescribed by a medical man, and dispensed in a medicine bottle.

The Psychic Life of Micro-Organisms. By Alfred Binet. Translated from the French by Thomas McCormack. Chicago: The Open Court Publishing Co. 1889.

This is a study in Experimental Psychology from the pen of Alfred Binet. We defer to a future number a notice of this interesting little book, recommending our readers in the meantime to obtain a copy of it for themselves in the original French edition or the American translation.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *English Retrospect.*

Asylum Reports, 1889 (*for* 1888).

(Concluded from p. 261.)

Bedford, Hertford, and Huntingdon.—A few cases of erysipelas occurred on the female side, and one patient died. This led to a thorough examination of the drainage and to all discoverable defects being removed.

Belfast.—This asylum is much over-crowded. Serious difficulties surround the problem how best to provide the necessary accommodation.

Durham.—This asylum is over-crowded, and about 200 cases are boarded at Whittingham.

It is a most unusual occurrence for a nurse to become insane. It,

unfortunately, happened here, and it was necessary to dismiss the unfortunate woman.

The statistical tables are not those recommended by the Association.

Edinburgh Royal Asylum.—The following paragraphs from Dr. Clouston's report are of special interest. They put in definite shape the experiences and ideas of many asylum physicians :—

In an asylum such as this, which admits patients from all classes of society, we have an opportunity of seeing any differences in the symptoms of mental diseases as they affect different classes. If, as is now generally held, mental disease is largely the outcome and one of the penalties of civilization, then the various conditions of life and heredity of different individuals and classes in our complex modern society can scarcely fail to influence the kind of mental disease ensuing. As there are no two minds precisely alike, and no two faces the same, so this human differentiation in its highest qualities is accurately reflected in mental disease, no two cases of which are precisely alike. No other disease shows such immense variety. Broadly, the following differences are seen between patients whose own brains have been educated and who come of an educated ancestry, as compared with patients coming from a less educated class.

1. The types of mental symptoms in the educated are far more differentiated and distinct. The lower you go in the social scale, and in civilization, the less distinct and complex are the types. Notoriously, the chief types in the Highland and Western Irish Celt are more simple, and this is still more so when one gets to the negro and the savage races, in whom the little mental disease they are subject to is apt to consist more of a confused delirium than anything else. Physicians from the West of Ireland, and from our Colonies, have told me that they do not recognize the clinical pictures of mental disease I have elsewhere given (Clinical Lectures on Mental Diseases), as being applicable to their patients. To get a fine type of Melancholia, for instance, you must get an educated brain. The power of expressing the feelings in vivid language, which education gives, is, no doubt, one way in which this fact is manifested.

2. In the educated classes we find more cases of melancholia than among the uneducated, more cases of subtile perversions of the reasoning power (monomania), more cases of instrospective morbid questionings and doubts, tending to paralysis of will-power, and more cases of regular periodicity of different kinds of symptoms (*Folie circulaire*, or " alternating Insanity ").

3. Among the class of private patients with us, the graver cases of brain disease are less frequent than among the paupers, there being less epileptic insanity, and much less general paralysis. In the last English Lunacy Blue Book (for 1887), we find that the admissions into English Institutions show more melancholia, less mania, much more congenital insanity, less than half the epileptic insanity, and one-third less general paralysis among private patients than among the paupers. Our differences between the private and pauper class are even greater. We have not had a case of epileptic insanity among our 650 richer patients for the last sixteen years, and only about six among our 500 intermediate patients.

4. A class of cases is sent in as pauper patients, which is not often sent as private patients at all, viz., mild imbecile and idiotic cases, certain varieties of senile dotage, and mild transitory cases of all kinds.

5. The mental and moral causes of the disease, such as trouble, anxiety, fright, disappointment, love affairs, &c., operate most strongly among the educated; the physical causes, such as intemperance, excesses, and bodily diseases, &c., operate most frequently among the uneducated. I find that while among private patients mental causes produce over one-third of the cases, they do so in less than a fourth of the paupers. There is 11 per cent. of difference. The physical causes, again, operate in 20 per cent. more of the uneducated than the educated. This also agrees with the facts, as stated in the tables of the English Blue Book. (Forty-second Report of the Commissioners in Lunacy, England, for 1887, p. 55.)

6. In the insane of the educated classes the mortality rate is lower by about

one-third in Scotland, and by one-half in England, as compared with the pauper classes. Here it has been for the last five years 6·9 per cent. among the private patients, and 9·72, on the average numbers resident, among the paupers.

7. A larger proportion of private patients recover than paupers. In the Scotch Royal Asylums five per cent. more recovered in 1887. In England the recovery rate last year was eight per cent. more in Registered Hospitals, which admit only private patients, than in County and Borough Asylums, which receive chiefly paupers. With us for the five years 1883-8, five and half per cent. more recovered among the private patients than the paupers, the numbers being 41 and 35·6 respectively. The cause of this is certainly not that the private patients' medical treatment is better, or that their superior quarters and more generous table have any specially curative effect. Pauper patients get better diet, more extras, and better accommodation, in proportion to what they have been accustomed to, as compared with private patients. In treating a private patient, I often regret that I cannot make the same difference for the better, in diet and accommodation to him that I can to a pauper, for the latter sometimes comes in half-starved, and we feed him up; he comes from poor and uncleanly surroundings, and we put him in clean and cheerful wards. This improvement in circumstances and surroundings have a directly curative effect on his disease. The real cause of the better recovery-rate among private patients is, that there is not so much severe organic disease of the brain, epileptic, and paralyzed cases, among them, nor so many idiotic and senile cases. The forms of disease they suffer from are more curable, in fact, in their nature.

8. As regards the admission and discharge of private and pauper cases respectively, there is this difference: on the whole, the private patients are not sent in so soon, and they are apt to be removed sooner, while more of them, after the acute early stage of the disease is past, are removed home before complete recovery. Since the boarding-out of quiet pauper cases was actively carried out by our two great parishes, there is, however, less difference than formerly in regard to the removal of quiet but unrecovered private and pauper cases respectively.

9. The richer class of private patients are not sent to us so soon as the poorer class. Only 12 per cent. of the former come to us within three months of the commencement of the disease, while 48 per cent. of the latter do so. The richer people have the means of proper treatment at home, and in private, of course, to a much greater extent than the poorer. This fact seems to show that an asylum is a greater boon to the poor than the rich.

The numbers of patients suffering from many of the varieties of mental disease sent to us each year differ greatly from those sent to English asylums. Notably, our congenital and epileptic insanity is not half the English amount, and our general paralysis is much less. But in the total amount of all the varieties combined we stand much the same as England. We seem to have more cases of ordinary mania and melancholia here, that make up the equality in numbers.

Glasgow. Govan and Lanark.--

The hours on duty here are from 6 a.m. to 8.15 p.m. one week, and from 6 a.m. to 7 p.m. the other. One afternoon from 2 to 7 one week, and 2 to 10 the other, is granted weekly. They are off duty every second Sabbath, and they get a fortnight's holiday every year. This may be considered a liberal allowance of leave, but it is not too much. The direction for further improvement is in shortening the hours of daily duty.

Concerning the training of attendants, a subject which he has done so much to advance, Dr. Clark says:—

Thus the special training of attendants became an organized system of our asylum work, and I had every encouragement to persevere with what was then a new departure in our asylum. I am happy to say that it is no longer a feature in this asylum alone; many asylums in this country have given practical effect

to the principle of specially training attendants and nurses, and the results so far have been very satisfactory.

The work of training consists of lectures, instructions in the wards, practical demonstrations in bandaging, dressing wounds, making poultices and fomentations, what to do in emergencies, and all the manipulations of nursing. The attendants and nurses have each a certain number of patients allotted to them for observations, and regarding these they make written reports. The lectures are given fortnightly, beginning in October and ending in April. Four examinations—two oral, one practical, and one written—are held, and certificates and prizes are given in April. By such means the faculty of observation is educated and developed, the patients are individually focussed, better cared for, and better understood.

Kent. Barming Heath.—Concerning fish as an article of diet in asylums, Dr. Davies says:—

The patients' dietary has been improved by the abolition of the fish dinners formerly given once a week, and the substitution for it of roast meat. Whatever may be said in praise of fish as an article of food, there can be no doubt that there is a strong prejudice against it amongst the working classes. I am not prepared to say that this prejudice has no solid foundation. Fish, as generally given in asylums, *i.e.*, alone, without any meat to follow, is not sustaining enough, and the difficulties of cooking it properly when in large quantities are well nigh insuperable. The fish dinner was originally given upon my recommendation, but a long experience of its many disadvantages has made me change my opinion as to its value, and induced me to advise its discontinuance.

Kent. Chartham Downs.—A former attendant communicated with the Commissioners relative to the conduct of four of the attendants. The Commissioners, having investigated the charges, directed their solicitor to prosecute the four men. Two were fined £3 each and costs; one was discharged on account of his inexperience; and one absconded before trial.

Limerick.—Dr. Courtenay records a case,

Where a woman had swallowed a chestnut, with, as she stated, an intention to put an end to her life. She complained at the time of difficulty in swallowing, and seemed to suffer pain. This after a few days passed away; she was able to eat all sorts of food, got fat and well, and lived for a year, when she fell into rapid decline, and died after a few weeks' illness, declaring to the end that the chestnut was still in her throat. After death the nut was found firmly impacted behind her œsophagus.

The death rate from phthisis is abnormally high.

Montrose.—Dr. Howden's experience has been so great, and his sagacity is so generally acknowledged, that his views on all matters relating to the treatment of mental disease must command respect. We, therefore, reproduce the following paragraphs from his report:—

Treatment has been directed mainly to the restoration of the generally-impaired physical health rather than to combating neurotic symptoms. It is better, I believe, as a rule, to treat excitement by good hygienic conditions—good food, unpolluted air, suitable clothing, abundant exercise, and even hard work, combined with mental occupation and distraction, than to attempt to repress or conserve energy, whether by mechanical or therapeutical restraint. A hard day's labour, whether on the farm, in the washing-house, or scampering on the braes, is a better hypnotic than any narcotic drug with which I am acquainted. While expressing this opinion, I am far from ignoring the value of

narcotics, and of the necessity of employing mechanical restraint in certain cases. The variety of manifestations in insanity is so infinite that we cannot afford to lay aside any of our armature, and the physician should bind himself to no creed, but keep an open mind unfettered, and himself perfectly free to adopt any means which the circumstances seem to indicate as the best for promoting recovery, prolonging life, or relieving human suffering. While maintaining perfect freedom of action, however, unaffected alike by fashion or public prejudice, we must not forget the errors into which our forefathers fell through ignorance and superstition, though they were probably actuated by motives as humane as we are, nor lose sight of the great principle of non-restraint (falsely so-called) established by Pinel, Tuke, Hill, Conolly, and others, which has revolutionized the treatment of the insane, so that the modern asylum has the character and aims of a hospital and a sanatorium rather than of a prison or a poorhouse.

In view of the discussion which took place last year in medical circles and in the public press on the use of mechanical restraint in the treatment of the insane, it may not be amiss to place on record a summary of my own practice during a period of thirty years, as a contribution to this subject. In doing so, I shall consider seclusion as well as mechanical restraint—first, because they are often employed vicariously or conjointly; and second, because I consider that seclusion in a dark room during the day is often a much more objectionable form of restraint than the use of mechanical means for restraining merely the muscles and the hands. Well, during the past thirty years 4,060 cases have been under treatment. Of these, 29 men and 26 women have been subjected to restraint by the strait jacket. The reason for employing mechanical restraint with these 55 persons was in *five* cases to prevent injury to the patient or others during attacks of exceptionally violent mania; in *nine* cases to prevent self-mutilation and suicide; while in the remaining 41 it was used to prevent the removal by the patient of dressings during surgical treatment.

It is stated that the English Commissioners consider and require the registration of the use of padded and locked-on gloves as *restraint*, while the Scotch Commissioners do not. This is such a small matter that it is hardly worth referring to. These gloves are generally used to prevent the patients pulling out their hair or picking the skin of the face or head with their nails, just as this variety of so-called restraint is employed to prevent babies sucking their thumbs. It is true that in our Scotch Register of Restraint and Seclusion there is no column for entering the use of locked gloves. In the old Daily Register, however, there was, and I find entries of the employment of locked gloves in the cases of three men and one woman, for a total period for the four of 150 hours during 20 years.

As to seclusion, I find that the number of persons that have been locked into a single bedroom during the day in 30 years was 106, 38 of whom were men and 68 women. The reasons for the seclusion were in 65 maniacal excitement, 14 epileptic seizures, and in 27 no reason is recorded. Dividing the thirty years into decades, the following is the record :—

1st Decennial Period—	
From 1859 to 1869 there were under treatment ...	1740
Of whom were restrained	6
Ditto secluded	91
2nd Decennial Period—	
From 1869 to 1879, under treatment	1526
Of whom were restrained	17
Ditto secluded	7
3rd Decennial Period—	
From 1879 to 1889, under treatment	1683
Of whom were restrained	32
Ditto secluded	8

It will be noted that during the first decade seclusion was resorted to much more frequently than during the next two. The reason of this was twofold. For some years the old Montrose Asylum was in use as well as the one at Sunnyside. In the old asylum there were practically no grounds for out-door exercise, so that a violent patient who might have worked off his superfluous energy in the open air, had to be secluded for the common good. During the second decade seven persons were secluded, and during the third eight.

Mechanical restraint was employed with six persons during the first decade, with 17 during the second decade, and with 32 during the third decade. The frequency of the use of mechanical restraint was determined, as may be surmised, by the number of cases under surgical treatment.

In connection with the use or disuse of restraint and seclusion, it is well that we should also record the serious accidents which have happened to patients, officers, or attendants during the same period, with a view to ascertain how far these might have been prevented by precautionary measures.

Concerning the proposed new lunatic hospital in London, Dr. Howden remarks :—

Proposals have been made lately in the London County Council to establish hospitals for the treatment of cases of insanity, where the highest medical knowledge and skill will be brought to bear on the study and treatment of insanity. If this project be carried out, it will no doubt be an advantage to the Medical Schools by affording extended means for the study of mental diseases, but that it will be a benefit to the patients is, I think, more than doubtful, as I do not consider that any asylum can efficiently fulfil its curative functions unless it has plenty of land around it to afford scope for the occupation and exercise of the patients.

Mullingar.—The nurses now wear

a unique and most becoming uniform. Since its adoption the general appearance of the female divisions has been improved, as it adds so many individual items of decoration, much needed in our cheerless wards. Although apparently a trivial matter of administration, a well-appointed uniform on a nurse of pleasing manner and appearance exercises a most important influence in the moral treatment of the insane woman by awakening in some degree those natural inclinations and sympathies inherent in the sex, and by furnishing an example of tidiness which often leads to recovery.

Middlesex. Banstead.—Beer is no longer included in the diet of idle patients. The allowance of cooked meat to both male and female patients has been slightly reduced.

Dr. Shaw reports that among the men 32 per cent. died from general paralysis, and 12 per cent. of the women from the same cause, or 22·1 per cent. of all the deaths arose from this fatal disease. But the mortality from phthisis was still greater, and formed 32·4 per cent. of all the deaths.

It is also noted that the recent Whitechapel tragedies had a very determining character upon the nature of the delusions both in the men and women admitted from the East End of London. As a rule the delusions were of a temporary nature, and soon subsided.

Monmouth, etc.—As it is more than probable that the new County Councils may exhibit unwillingness to spend money on new buildings, it may be useful to note that the Committee of this asylum, in their report, are at pains to show that since 1883 no less than £19,634

have been saved to the county and poor rates by providing all necessary accommodation. They add :—

> In connection with the management of an asylum there is no extravagance greater than to board patients out in other asylums from an unwillingness to face the cost of building.

Newcastle.—It is a matter of great regret to Dr. Wickham's numerous friends that ill-health has compelled him to resign his appointment. Although he had only been superintendent 18 years, and in charge of a comparatively small asylum, the cares of office have broken him down at a painfully early age. We earnestly hope that relief from asylum responsibility will speedily restore his health, and that he may live many years to enjoy his pension of £400 per annum.

Northampton.—Mr. Greene is much to be commended for the special arrangements he has made for the care and education of idiot children. The new buildings for them are now open, fully equipped for their education and training. There are class-rooms, drill appliances, gymnasium, and all the usual kinds of amusements. Mr. Greene reports that already the advantages of special treatment are apparent. Many of the children have improved to a greater extent than would have been thought possible, considering the short time the teaching and drill have been in use.

Northumberland.—This asylum appears to have been much improved by the recent additions, but further structural alterations appear to be required. An American bowling alley has been provided for the use of the patients.

Dr. McDowall refers to a special feature connected with the employment of patients :—

> Not only are they employed at what may be best for them mentally and bodily, but efforts are made to teach them trades, and thus to increase their usefulness. These apprentices are chiefly placed in the tailors' and shoemakers' shops. Of the men employed there at present, nine have been taught what they know of the work since they came here, and, though they cannot be described as first-class workmen, they are of considerable service.

Classes of instruction were continued in the early part of the year, and were brought to a close by a course of ambulance work. Five attendants passed the necessary examination, and obtained the certificate of St. John Ambulance Association. It is intended to continue this kind of instruction.

No machinery is in use in the laundry, but no difficulty seems to be experienced in getting the work done, and much labour has been saved by the adoption of the paraffin process of washing.

Norwich.—Besides the monthly meetings of Committee, some of the Visitors go through the wards weekly. Fifty-six such visits were made during the year. It is correctly remarked :—

> These, when judiciously made, are not only beneficial to the officers, but they bring your Committee into closer touch and sympathy with the inmates, and do

much towards dissipating the sense of isolation and loneliness that ever has a most depressing effect on our patients.

This asylum, containing on an average 249 patients, is still without an assistant medical officer. When Dr. Harris takes "change and rest from his duties" a gentleman acts as his *locum tenens*. This cannot be regarded as satisfactory, and Dr. Harris must be very much overworked.

It is proposed to provide residences on the estate for the married officers.

This asylum seems to be managed with great energy and care. One of the good features is the presence in each dormitory of an electric push, to which the patients have access. This arrangement has never been abused, and has been the means of saving one life.

Nottingham. Borough.—Concerning the use of gloves as a means of restraint, Mr. Powell says :—

> The gloves were used in the case of a man who, night after night, destroyed every article of his clothing and bedding, and I was unable to procure anything which he could not tear up, so I was driven to put on locked gloves to prevent it. He continued to wear them for some time, but no sooner were they left off than he resumed his old habit, and, instead of restraining him again, I placed him to sleep in the observation dormitory, and instructed the attendant to prevent him from tearing his clothes. The result has been to a considerable extent satisfactory. The experience of this case has strengthened the view which I held before, that when it is possible to keep patients from their mischievous habits by means of personal attention it should be done by night as well as by day, because there is no doubt that to restrain mechanically has a degrading influence upon the patients, and also has a bad effect upon the attendants; it makes them less energetic and careful if they know that means other than their attention are readily applied to prevent patients doing mischief.

Nottingham. County.—An amusement hall seems to be much required. At present the social gatherings are held in the laundry, an arrangement, as the Commissioners remark, unique in this country.

Nottingham Lunatic Hospital.—Dr. Tate reports :—

> I have much pleasure in stating that another year has passed without either *restraint* or *seclusion* having been found necessary. During my thirty years of superintendence I have endeavoured to avoid the use of either, and, with the exception of one instance of the latter, I have so far succeeded in doing so. I have been strongly tempted on several occasions to employ both, but by delaying the evil hour have been enabled to do without either. An occasion might, however, at any moment arise when I should consider mechanical restraint of some sort not only necessary, but the wisest and most humane method of treatment.

Oxford.—Post-mortem examinations were made in all cases of death except one.

Portsmouth.—A walk has been formed round the estate. Dr. Bland reports that it is much appreciated by the patients, and that on an average, weather permitting, 121 men and 146 women walk there daily.

Roxburgh, Berwick, and Selkirk.—Dr. Johnstone reports :—

> The prevalence of diarrhœa, however, during the past winter pointed plainly to some flaw in the sanitary arrangements, and a careful investigation brought

to light several serious defects in the drains. These defects have been rectified, and the whole drainage system is being thoroughly overhauled. "Buchan" traps are being introduced wherever necessary; the ventilation of the drains is being improved; in some places branch drains have been entirely relaid, and each drain is carefully tested before being again brought into use, and its position accurately recorded in a plan. This work is being carried out by the asylum staff.

This is one of the few asylums where the number of patients resident diminishes yearly. This is due to the persistent efforts of the medical superintendent to board all suitable cases in private dwellings.

Surrey. Cane Hill.—The proposal to enlarge this asylum has been abandoned for the present. The magistrates naturally wish to throw the expense upon the new authorities.

St. Andrew's Hospital.—This great hospital appears to continue its good work with unabated success and energy. There is nothing calling for special remark, except, perhaps, that the electric light has been introduced, though not throughout the establishment.

St. Luke's Hospital.—Various structural alterations and other improvements were effected during the year.

The medical report records a

case of special interest, the wife of an officer in the army, who recovered after a residence of 14 years. She left the hospital eight months since, and we have every reason to believe she continues well. There is some encouragement to persevere with treatment beyond the ordinary term of twelve months, in the fact that seven of the recoveries took place in the second year of residence.

Salop and Montgomery.—The improvement of the drainage is almost complete, and it is expected that when these and other sanitary alterations are finished, typhoid and diarrhœa will be banished from the place.

Somerset and Bath.—Several structural alterations have been effected during the year.

Concerning attendants, Dr. Wade says :—

It is satisfactory to be able to say that the improvement in length of service among the attendants referred to in former reports continues. There are now no attendants in charge of wards on either side of the house who count less than five years in the service of the asylum. I am becoming more firmly convinced every day that the really best way to secure good attendants and to retain them, is, while duly paying every attention to their comfort and making their situations worth keeping, to refuse all applications for attendants' places from persons who have served in other asylums. The "rovers" seldom stay anywhere long, and they unsettle many who would not otherwise change. Good attendants seldom change. Those who leave "for a change" are not often worth retaining, and are no acquisition to any other asylum. There are occasional exceptions in which ample and sufficient reasons exist for a good attendant leaving a particular asylum, and such may and sometimes do become valuable servants in other institutions; but the rule as a general one holds good, and the exceptions are few and far between. At the same time, it is absolutely necessary to inquire carefully into the antecedents of all applicants for situations, as the most worthless will often conceal the fact that they have previously served (probably with disgrace) in an asylum. It is safest to engage no attendants from a dis-

tance without inquiring of the superintendent of the nearest asylum as to whether he knows anything of them. I have frequently avoided engaging the "black sheep" of other asylums by this precaution.

Staffordshire. Burntwood.—A bath-tap is now in use here which appears to be an improvement on those generally found in asylums. It is called "The Safety Lock-lever Asylum Bath Valve." With it cold water must necessarily be first admitted to the bath, and the inlet and outlet are of good size, enabling the bath to be rapidly filled and emptied.

The number of patients in residence has markedly increased during the year.

In a former report Dr. Spence had occasion to remark that the number of patients suffering from general paralysis was not at that time so great as it had been, but of late there has been among the admissions a marked increase of victims to this sad disorder; in other respects he considers that the type of the mental derangement in recent cases has not varied materially from that observed during the past seven or eight years.

Suffolk.—This asylum has again been visited by a severe epidemic of dysenteric diarrhœa and typhoid, apparently caused by contamination of the water by sewage. Dr. Eagar gives an interesting account of this epidemic, and we can only express our sympathy with him in the trying circumstances in which he has been more than once placed. We know of no other asylum where for such a number of years these diseases have so prevailed. The difficulties were further increased by the breaking of the pumping shaft. As the pumping apparatus was not in duplicate, the asylum was almost without water for two days, and on short allowance for three weeks. Consequently the sewers became blocked and sewage escaped into the soft water tank.

It is not necessary for us to copy Dr. Eagar's account of the sanitary difficulties, but we can recommend its perusal to anyone who requires to be thoroughly impressed by the miseries and dangers accompanying bad drainage.

In order to reduce the number in the wards, 17 cases were transferred to the workhouse. The experiment has been successful, only one case having been returned to the asylum. This fact shows that asylum superintendents ought to be always alive to the judicious use of the workhouse for selected cases.

Waterford.—The much-needed additions to this asylum have at last been begun.

West Riding. Wakefield.—There is abundant evidence to show that the nursing of the sick in asylums is receiving increased attention. On this subject Dr. Bevan Lewis, in his excellent report of his well-managed asylum, says:—

It may be of interest to note as very conclusive evidence of efficient and careful nursing, that amongst the feeble and paralytic class *bed-sores* are now of rare occurrence in our midst, and that although from the nature of certain cases unavoidable, at the present time I find from my returns that amongst 1,360

patients not a single bed-sore exists. This success is to be attributed to the free use of the water pillow; to careful and continuous observation; and, above all, to the conscientious discharge of their duty by a thoroughly efficient *night staff*.

It is also reported, as proving the beneficial results of good sanitary arrangements :—

The sanitary fittings within the building in connection with the recent drainage system introduced have proved highly efficient; the whole system throughout has worked satisfactorily. The health of the community has improved in a corresponding degree, we no longer have to complain, as in former days, of grave outbreaks of diarrhœa, dysentery, erysipelas, extensive chronic ulcerations of the intestinal canal, of erythema and fibricula, which were clearly attributable to sewage gas, defective ventilation, and impure drinking water.

York Retreat.—The villa at Scarborough has been occupied during the whole year. Some patients resided there the whole time, others were there for longer or shorter periods.

Dr. Baker is confirmed in the opinion that the efficiency and power of the Retreat have been largely increased by the appointment of another resident medical officer.

The opportunity for increased study of each individual patient's illness, and the added power of supervision of the carrying out of suitable treatment must be a manifest gain, whilst superadded to this we secure opportunities of surrounding the patients with increased social attentions and companionship, and also a larger power of supervision over the various *employés* of the institution, in carrying out efficiently, gently, and kindly, the different duties of their daily lives.

Most careful attention has been given to the preparation of plans for the erection of a one story villa for the treatment of acute female cases of insanity. It is proposed to erect this cottage in the southern garden, connecting it with the women's fifth gallery by a corridor thirty-five feet long. The building will contain four sitting-rooms and five bedrooms, with a padded-room and a room for the nurses, also a bath-room with suitable sanitary arrangements. The frontage to the south will be about sixty feet, and the building from north to south about ninety feet. Fresh air is to be supplied by means of an engine and fan, with an interchange of air three times in an hour. A tower provided with a coil of pipes will give the necessary extracting powers.

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2. *Colonial Retrospect.*

New South Wales.

Report of the Inspector General of the Insane for 1888.

Dr. Manning is able to give a good account, upon the whole, of the insane and their treatment in the Colony, the lunacy affairs of which he supervises with so much ability and success.

In New South Wales, as in Great Britain, the burden of insanity presses heavily, and without signs of material diminution. It is, however, satisfactory to learn from this report that, although the insane population is increasing at a rapid rate, the increase is not disproportionate to that of the population.

The number of insane persons on the register on December 31st,

1888, was 2,898, showing an increase during the year of 76, the average of the previous five years having been 99.

The proportion of insane to population was 1 in 374, or exactly what it was in 1871.

The following table is interesting as showing the comparative proportions of insane persons to population in New South Wales and in England during the last 20 years:—

Year.	Population of New South Wales.	Total Number of Insane in New South Wales on 31 Dec.	Proportion of Insane to Population in New South Wales.	Proportion of Insane to Population in England.
			Per M.	Per M.
1869	485,356	1,226	1 in 395 or 2·53	1 in 403 or 2·48
1870	502,861	1,289	1 in 389 or 2·57	1 in 400 or 2·50
1871	519,182	1,387	1 in 374 or 2·67	1 in 394 or 2·53
1872	539,190	1,440	1 in 374 or 2·67	1 in 387 or 2·58
1873	560,275	1,526	1 in 367 or 2·72	1 in 381 or 2·62
1874	584,278	1,588	1 in 367 or 2·72	1 in 375 or 2·66
1875	606,652	1,697	1 in 357 or 2·80	1 in 373 or 2·68
1876	629,776	1,740	1 in 361 or 2·77	1 in 368 or 2·71
1877	662,212	1,829	1 in 362 or 2·76	1 in 363 or 2·75
1878	693,743	1,916	1 in 362 or 2·76	1 in 360 or 2·77
1879	734,282	2,011	1 in 365 or 2·74	1 in 363 or 2·75
1880	770,524	2,099	1 in 367 or 2·72	1 in 353 or 2·83
1881	781,265	2,218	1 in 352 or 2·84	1 in 352 or 2·84
1882	817,468	2,307	1 in 354 or 2·82	1 in 348 or 2·87
1883	869,310	2,403	1 in 361 or 2·77	1 in 345 or 2·89
1884	921,129	2,524	1 in 364 or 2·74	1 in 345 or 2·89
1885	980,573	2,643	1 in 374 or 2·67	1 in 348 or 2·87
1886	1,030,762	2,717	1 in 379 or 2·63	1 in 349 or 2·86
1887	1,042,919	2,821	1 in 369 or 2·71	1 in 346 or 2·88
1888	1,085,356	2,898	1 in 374 or 2·67	

The results of treatment in the various hospitals and asylums for the insane of the Colony seem to have been eminently satisfactory, if we may judge from the following summary:—

	Males.	Females.	Total.
Average percentage of recoveries on admissions and readmissions for 10 years, 1879-1888	41·49	43·48	42·23
Average percentage of patients relieved on admissions and readmissions for 10 years, 1879-1888	5·54	8·47	6·63
Average percentage of deaths on average numbers resident for 10 years, 1879-1888	7·37	5·66	6·73

The following extract is full of interest in relation to the important question of the training of nurses, as to which there was some discussion at the recent annual meeting of the Association:—

Training of Attendants and Nurses.

The importance of training the attendants and nurses for their special duties to which I alluded in my last report has received attention during the year, and Drs. Sinclair and Chisholm Ross have delivered courses of lectures, and given special instruction as to their duties to classes of nurses and attendants. At Dr. Sinclair's request, the written and *viva voce* examinations were conducted by myself, and I was not a little gratified to find to how marked an extent the nurses had profited by the instruction given them, and to realize how their usefulness was increased by the knowledge so gained.

I have lately been in communication with Dr. M'Laurin, the Medical Adviser to the Government, with a view of completing the system of training, which Drs. Sinclair and Ross have so happily initiated and are carrying out, by supplementing the special training for mental cases by practical instruction for some months in a General Hospital, and hope soon to receive the Colonial Secretary's authority to allow nurses selected from Gladesville to undergo further training at the Coast Hospital in the nursing of such maladies as are only occasionally seen in Hospitals for the Insane, but which the nurses employed there should be competent to deal with.

The reception house at Darlinghurst continues to discharge useful functions, to which Dr. Manning thus refers:—

The number of patients in this institution at the close of 1887 was 11, of whom 10 were under remand and 1 under lunacy certificate.

During the year 641 patients were admitted—270 under remand and 371 under lunacy certificate, making a total of 652 under care and treatment. Of these 101 were admitted twice, being sent first under remand and subsequently certified and readmitted. Of the cases under remand admitted under section 1 of the Lunacy Act Amendment Act, 280 in number (including 10 remaining at the close of last year), 172 were discharged as sane, 101 were certified and returned to the Reception House, 3 died, and 4 remained at the close of the year. Of the cases under lunacy certificate admitted under section 49 of the Lunacy Act, 372 in number, including 1 remaining from last year, 331 were sent to Hospitals for the Insane, 31 recovered, 4 died, and 6 remained at the close of the year. Of the total number under care 203 were discharged recovered. The admissions were not unusually numerous. Four patients under certificate, and 19 under remand were admitted twice during the year, and 40 were readmitted during the year who had been inmates during some former year. The number under treatment was 90 more than during the year 1887, but less than during the years 1884-5-6. I visited this Institution on January 23rd, February 28th, March 15th, April 10th, May 10th and 29th, June 18th and 29th, July 17th, August 7th and 29th, September 18th, October 23rd,

and November 24th and 30th, and at these visits saw all the patients and inspected all parts of the Institution. On several occasions I saw the patients at dinner, which was properly cooked and neatly served.

The building has been kept in excellent repair and all necessary alterations have been carried out. At all my visits I found it clean and in good order.

The Institution continues to do good and useful work, as is shown by the number of patients who recover in it without being sent on to hospital, and its management is highly creditable to the officer in charge.

The whole report is full of interesting and instructive matter, and the Colony is to be congratulated upon having as its adviser in lunacy matters so wise and enlightened a physician as Dr. Manning, and still more upon acting so readily as it seems to do upon his advice.

PART IV.—NOTES AND NEWS.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The forty-eighth Annual Meeting of the Association was held at the London Medical Society's Rooms, Chandos Street, London, July 25th, 1889.

Among those present were :—Dr. Baker, Dr. F. Beach, Dr. Blandford, Dr. P. E. Campbell, Dr. Clouston, Dr. Cook, Dr. Dodds, Dr. Bonville Fox, Dr. Henry Hicks, Dr. Jepson, Mr. Rooke Ley, Dr. Murray Lindsay, Dr. Lyle, Dr. H. C. MacBryan, Dr. Macleod, Dr. George Mickley, Dr. Needham, Dr. Newington, Dr. Conolly Norman, Dr. Paul, Dr. Rees Philipps, Dr. Nathan Raw, Dr. Rayner, Dr. Rutherford, Dr. James Rutherford, Dr. R. Percy Smith, Dr. Spence, Dr. Strahan, Dr. Hack Tuke, Mr. C. M. Tuke, Mr. T. S. Tuke, Dr. Urquhart, Dr. Wiglesworth, Dr. J. Kennedy Will, Dr. T. Outterson Wood, Dr. W. Wood, Dr. Ramsden Wood, Dr. T. F. Woods, Dr. Worthington, Dr. Yellowlees. Visitors : —Dr. Bott, L.C.C., A. Hoare, L.C.C., and Clark Bell, Esq. (New York).

Dr. CLOUSTON (the retiring President)—Gentlemen : There are only two duties that now fall to me. The one is to thank you very heartily for the honour you did me in conferring this Presidency upon me. I hope you will give me credit for having done my best to do its duties during the year of my office (applause). The second is the very pleasant duty of resigning the chair to the new President—Dr. Hayes Newington. He is well known to every member of this Association; and is particularly well known to me. I assure you I resign this chair with the greatest confidence that we shall be worthily presided over during the next twelve months. I will now ask Dr. Newington to take the chair.

The chair was then taken by the President, Dr. H. Hayes Newington.

The PRESIDENT—Gentlemen : I must thank you very heartily for having placed me in this proud position, and I assure you that I assume it with a sense of deep humility. I feel that it will be impossible for me to come up to the mark of my predecessors, but I will do my best, and you may rely upon my maintaining the interests and reputation of this Association as far as lies in my power. The first duty that lies before us is the proposal of the new Council and office bearers, as shown in the ballot paper on the table. Some few alterations have been made in the list as it was originally printed, and it must also be clearly understood that if any gentleman wishes to propose another name in place of any on the paper, he is not only quite at liberty to do so, but that this is his bounden duty. The Council only nominates; the annual meeting elects.

Dr. MURRAY LINDSAY—May I ask whether in voting for this list it includes also the Parliamentary and Pensions Committees?

The PRESIDENT—They remain unchanged.

Dr. NEEDHAM—I would ask whether any of the gentlemen on this list have not attended Committee meetings at all during the past year?

The PRESIDENT—We have no record of the attendances of Council meetings, I believe; but my own experience is that the great majority of those on the Council have not attended any of the meetings.

Dr. NEEDHAM—That is my own impression, and it hardly seems right to keep them on the list unless they will attend.

Dr. WHITCOMBE—I think the list of the attendances of members of the Council should be published annually, and sent round to the members with the notice of the annual meeting. That would be a very useful record of the work that has been done.

The PRESIDENT—That is very much my feeling. I should have made a similar proposition had I not been in this chair. I think myself that if gentlemen accept the privileges and honour of office they should also accept the full duties of the office. The avoidance of responsibility often leads to unpleasant complications and misinterpretation as to the mechanism of this Association. I think if the Council were fully attended no such question as occasionally arises would ever do so. It would be perfectly possible for the Association to request the Secretary to keep such a list, and there would be no reason why the list should not be sent round with the ballot paper.

Dr. NEEDHAM—I beg to move that the attendances of members of the Council be recorded and sent round to the members with the ballot paper.

Dr. WHITCOMBE—I second that.

Dr. CONOLLY NORMAN—I would suggest that the list of attendances should be printed on the ballot paper, so that it may be absolutely brought before the voters.

Dr. W. WOOD—I very much question the expediency of publishing a record of the attendances. I think for the information of the Council it is right that the list should be kept, but it would not be right to publish to the world the names of delinquents. It is rather an invidious thing to do.

Dr. SAVAGE—There is a record kept of the attendances at every Council meeting, and rather in opposition to what has been said, I think I am able to say, looking cursorily through it, that there are only two or three members who have not attended any meeting at all.

Dr. URQUHART—I think that there is a poor attendance because the Council meetings are generally held in London. In order to broaden the basis of the Council as much as possible, members have been placed upon it who have to come very long distances to attend the meetings. Although they may not all attend they are still on the Council, and may make their wishes and views known to the Council. It would be a pity to remove any names because they do not appear sufficiently often on the attendance list, for these very men may have written a good many letters and taken a great deal of trouble about the affairs of the Association.

The PRESIDENT—Will Dr. Needham accept Dr. Conolly Norman's proposal that the list of attendances shall be printed on the ballot paper?

Dr. NEEDHAM—Yes.

The PRESIDENT—Then it is proposed by Dr. Needham, and seconded by Dr. Whitcombe, that the attendance of members of the Council be recorded by the Secretary, and that the number of such attendances be placed against the names of the various members of the Council on the ballot paper.

The resolution was carried.

ELECTION OF OFFICERS.

The PRESIDENT—We now proceed to the election of officers. The rule, I believe, is, unless it is otherwise demanded, that the election proceeds on the

whole paper, and not on single names. While the papers are being collected, the acting Honorary Secretary will read the names of the gentlemen whom it is proposed to elect as members of the Association.

(The list was read. See page 466.)

Dr. Percy Smith and Dr. Rees Philipps were appointed scrutineers.

Dr. T. Outterson Wood—I would ask whether the Association would consider it well that the year of entry of the members shall be attached to their names in the annual list. The Council have great difficulty at times in arriving at the seniority of members when wishing to advance them to office, and I think this would be a very good opportunity of obtaining the sanction of a general meeting to that addition in the annual list. I may mention that I have already gone through twenty years of the Association, and have attached to the names of members for that period the dates at which they were elected. I shall be very happy to complete that, and to make a present of my labours to the new Secretary. (Applause.)

The President—You propose that it be an instruction to the Editors to see that the date of election is put against the name of every member in the annual list. Is there any objection to that course?

Dr. Hack Tuke—I beg to say that the Editors have nothing whatever to do with the list of members published in the Journal. The preparation and annual correction of this list rest with the Secretary. Sometimes they voluntarily make corrections, but it certainly is no part of their work. They have quite enough to do already.

The President—The Secretary, then, will be instructed to obtain these figures and have them appended to the list in the Journal. I have now to inform the Association that the scrutineers report that with one exception the ballot has been in favour of the list of names as proposed by the Council. At the same time, if the member who has made that alteration would wish to take a ballot with regard to that name, we must, by the rules, have the ballot.

No response being made,

Dr. Murray Lindsay—I wish to propose that the Parliamentary Committee be strengthened by the addition of several names, of which I have a list. On the Parliamentary Committee, as stated in the Journal last year, out of a total of 14 there are only two representatives of county asylums, and one of borough asylums. That seems to be anything but an adequate representation of county and borough asylums. I would propose, therefore, that the Committee should be strengthened, and more especially so as I have a further proposition to make with regard to the Pensions Committee. I think the Pensions Committee is a frail and feeble body. (Laughter, and hear, hear.) I have been, I am sorry to say, one of its feeble limbs, and I think we require a crutch. It seems to me if we strengthen the Parliamentary Bills Committee, which is, or should be, a very influential Committee as in the British Medical Association, that then the question of pensions, or any other Parliamentary matters, might be safely left to that Committee. I will propose the addition of the following names to the Parliamentary Bills Committee: Dr. Mickle, to whom we are much indebted for his efforts in connection with the Parliamentary Bills Committee of the British Medical Association. He has, no doubt, materially assisted in getting two important resolutions passed by that Committee. One, relating to transfer service, was taken in hand by Dr. Farquharson, M.P., before the Standing Committee on Law, but he failed to get it passed, the Government alleging that there were practical difficulties in the way. Of course there are. But it is our business to indicate the principles, and it is the business of the Government and the County Councils to carry our principles into practice. (Dr. Lindsay then proposed certain names.) Dr. Yellowlees makes a very good suggestion to include the Secretaries for Scotland and Ireland in this added list.

The President—Perhaps it would be convenient to deal with the question of the election of officers first, and then with the appointment of the Committee.

I take it that we can return the officers as elected, as there is practically only one small difference on the part of some member who does not insist on taking the sense of the meeting. I, therefore, announce that the members whose names appear on the ballot list have been duly elected. Now as to the Parliamentary and Pensions Committees, Dr. Lindsay has rightly stated that the county asylum interest is not so strongly represented as the various other interests; but it is to be remembered that the Parliamentary Committee was appointed specially to consider the Lunacy Bill, in which County Asylum interests were very little involved. Private asylums and hospitals were far more affected by that Bill, and, therefore, a greater proportion of members attached to those institutions was appointed. As I understand, Dr. Lindsay wishes to add eight names of Superintendents of county asylums to that Committee.

Dr. POWELL—I will second Dr. Lindsay's proposal.

Dr. OUTTERSON WOOD—Would their attendances also be noticed, because some of these gentlemen have attended no meetings at all? You are going to add a number of names, and it occurs to me that you had better take out some who do not attend, and add others who will.

The PRESIDENT—I think that all the members have attended once or twice, and expressed their opinions on various parts of the Bill relating to their own particular interests.

Dr. WHITCOMBE—I am sorry to disagree with Dr. Lindsay. I feel that large committees are a very great mistake. (Hear, hear.) Small committees do far more work, and generally do it much better, than large ones. I think, looking at the large number of names on the present Parliamentary Committee, it would be a great mistake to add to their number. If a small committee were made, consisting of gentlemen who take special interest in the subject, far better work would be done, and in a better manner than at present.

Dr. MURRAY LINDSAY—However small or however large a committee may be there will always be some absentee.

Dr. NEEDHAM—I should like to propose an amendment that the Parliamentary Committee be altogether reconstituted. That would answer Dr. Whitcombe's suggestion. It seems to me that a committee of 24 or 25 members would be utterly beyond all power of doing practical work, and although possibly a considerable number of members could not attend, it seems very undesirable to have a cumbrous machine really capable of doing very little work.

Dr. WHITCOMBE—I will second the amendment.

Dr. URQUHART—I propose that the Parliamentary and Pensions Committees be merged into one.

The PRESIDENT—I think a member who takes the responsibility of sweeping away the present body must also have the courage to indicate the way in which he will reconstitute the Parliamentary Committee. It would be more convenient if the names were submitted to the Association. Originally the Parliamentary Committee had the charge of looking after questions connected with pensions, but it was found that so much extra work had to be done that a separate committee was appointed. If Dr. Urquhart's proposal is accepted, we shall be returning to where we started from four or five years ago.

Dr. MURRAY LINDSAY—If Dr. Needham's proposition meets with the support of the meeting, I am quite willing to withdraw mine; but I feel a delicacy and difficulty in touching the old Committee. I am quite willing, if the meeting approves of it, to withdraw my motion in favour of Dr. Needham's.

The PRESIDENT—Perhaps it would save time while the list is being drawn up if I ask Dr. Paul to submit his annual balance-sheet.

Dr. PAUL then read the balance-sheet (which will be found on the next page). He said: I cannot tell you when we have had such a balance-sheet as that, and I feel exceedingly grateful on my own part for the grand cheque we received from Scotland. I do think that our Scotch friends deserve our special thanks for what they have done. (Applause.)

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Treasurer's Annual Balance Sheet, 1888-89.

RECEIPTS.	£	s.	d.
To Balance—Cash in Hand, 1887-88	75	4	5
Subscriptions received from England and Wales...	254	2	0
Subscriptions, Secretary for Ireland	40	19	0
Examination Fees (Ireland)	9	9	0
Subscriptions, Secretary for Scotland	52	10	0
Examination Fees (Scotland)	69	6	0
Sale of Journal	132	0	0
Dividends on Consols, Gaskell's Fund, £1,347 Stock	38	11	7
Dividends on Consols £306 Stock	8	15	3
Fees received from Examinations for the Certificate in Psychological Medicine (England)...	12	12	0
	£693	9	3

EXPENDITURE.	£	s.	d.
By Annual, Special, and Quarterly Meetings ...	20	3	0
Expenses of Reporting at various Meetings ...	14	17	8
Editorial Expenses	12	12	0
Printing, publishing, engraving, advertising expenses, and postage of Journal	366	12	5
Sundry Expenses, Printing, Advertising, including Parliamentary Expenses...	20	0	5
By Treasurer	6	6	0
By Secretary for Ireland	1	7	8
By Secretary for Scotland	8	7	10
By General Secretary	7	3	6
Gaskell Fund Expenses	1	19	6
Ditto Prize—Dr. Hyslop	30	0	0
Examiners' Fees	40	8	6
Wyon and Co.	3	4	0
Balance in hands of Treasurer	160	6	9
	£693	9	3

Examined and found correct.

T. OUTTERSON WOOD,
D. YELLOWLEES, } AUDITORS.

July 25, 1889.

J. H. PAUL,
TREASURER.

Dr. HACK TUKE—I should like to call your attention to the proceedings of the last meeting, when the balance-sheet was considered. There was at that time what I ventured to regard as a false alarm with reference to the condition of our finances. Our expenditure was very greatly increased in the course of ten years, and it was thought that we were going to the bad very distinctly, but I ventured to point out then that our income was also increasing in a still greater proportion than our expenditure, and therefore I took a very favourable view of what our balance-sheet would be this year. I am glad to say that my expectations have been quite fulfilled. I think our finances are in a very satisfactory condition. It will be seen that more money has been received from the sale of the Journal, while the editorial expenses in printing, publishing, engraving, and advertising have been some £55 less than last year. I do not, however, mention that as altogether a satisfactory circumstance. I think it has been the feeling of the Association that money ought to be spent freely on the Journal, including, of course, the engravings. We have done less this year in the way of illustrations, and that is one reason of the lessened expense. But is that an unmixed advantage? I doubt it. Again, the Parliamentary expenses have been less this year, and there has been a marked difference in regard to the expenses of special and quarterly meetings. There were a greater number of special meetings in the previous year. There is one point I should like to refer to which has come to our knowledge since the accounts have been audited, and I would suggest that even now an alteration should be made in the balance-sheet. The Gaskell prize examination took place a few days ago, and the prize was awarded to Dr. Hyslop, the Assistant Medical Officer of Bethlem Hospital. In the last year's account there was an entry of a sum of £30 awarded to the then successful candidate, Dr. Mortimer. In our present balance-sheet no such sum appears, because, although awarded, it has not been paid. I would therefore suggest, now that we know that the £30 has been awarded, although it has not passed out of the Treasurer's hands, it would make our balance-sheet more correct if we included it, and then instead of having a balance of £190 we should have £160. I would propose, therefore, that that alteration be made if the Auditors approve, and that the accounts of the Treasurer be now passed.

Dr. OUTTERSON WOOD—I suppose Dr. Tuke means that the amount of £30 having been practically expended during the past year, it should be deducted from the balance. The Auditors have no objection to that.

Dr. CLOUSTON—I second Dr. Tuke's motion. With regard to our financial position, the so-called "false alarm" to which our worthy senior Editor has referred was raised by myself, and I think the justification of that false alarm has been the magnificent balance-sheet that was read out to you just now. The false alarm consisted in this. I said I thought an association like ours should, like an individual, always have a balance on the right side at the end of the year. I do not think anyone will dissent from this. The result has been that we have saved all round, and we may congratulate ourselves that this year we have acted on the right principle of living within our income, instead of the wrong principle of exceeding it. May I also venture to take the opportunity of urging that the certificate in psychological medicine of this Association should be more sought after, and that we should endeavour to make it more sought after by the junior men entering asylums, and by the students of our medical schools. We in Scotland have endeavoured to carry this out, and with the result that we have a very large and increasing number of applicants for this certificate in the northern part of the kingdom. As a matter of fact, I believe it is quite an understood thing by the superintendents of asylums in Scotland that their junior medical officers shall go in for their examination and take this diploma. I am certain it is a good thing for a junior medical officer to devote himself for a short time to reading up a specialty. It gives him a certain scientific interest, and instead of his beginning with the ordinary administrative duties he comes to look at his work from a medical and scientific point of view as well. I can speak very strongly from my experience, both in regard to my

own students in Edinburgh and to my assistants, that it is a very good thing for the young men to take this diploma, and those who have already taken it will be the first to admit this. I therefore take the opportunity of urging upon my professional brethren in England that they should give us a little help in this matter, and should to some extent imitate our example in Scotland. If it does not sound egotistical, I may add that in the Edinburgh University I accept the questions put by the examiner of our Association as my class questions, so that my students, if they pass the class examination satisfactorily to the examiner, by paying three guineas get their diploma as well, if they pass a *viva voce* examination in addition to my ordinary class examination. I can recommend this plan very strongly as being successful.

Dr. WIGLESWORTH—I should like to make one remark with regard to the accounts. I am not so sure that it is altogether a matter of congratulation that the expense of engraving and illustrating the Journal should be less this year than before. I think it is a matter of great importance that the Journal should be well illustrated, and it would be a false economy on our part to give up engravings or illustrations if they could be of the least service.

The PRESIDENT—It is proposed by Dr. Tuke and seconded by Dr. Clouston that Dr. Paul's statement of accounts be accepted. We know they are safe in Dr. Paul's hands, and that we can accept his report.

The balance-sheet having been accepted,

The PRESIDENT said—I have now to state that the gentlemen proposed as members of our Association have been duly elected. Then to return to the subject of the Parliamentary Committee, it has been proposed by Dr. Needham and seconded by Dr. Murray Lindsay that the following be the Committee:—Dr. Blandford, Dr. Newington, Dr. Wood, Dr. Clouston, Dr. Savage, Dr. Paul, Dr. Stocker, Mr. Ley, Dr. Hack Tuke, Dr. Mickle, Dr. Wiglesworth, Dr. Whitcombe, Dr. Murray Lindsay, Dr. Greene, Dr. White, Dr. Rees Philipps, Dr. Conolly Norman, Dr. Urquhart.

The resolution was agreed to.

Dr. MURRAY LINDSAY—If I am in order in saying a few words about the Pensions Committee I would propose that the Pensions Committee may be entirely abrogated, and we should follow the lead of the Parliamentary Bills Committee of the British Medical Association, and pass two similar resolutions to those passed by them. They appear in the "British Medical Journal" for July 6th. The first is sect. 65, p. 36, line 38. It is suggested to omit the words "wholly or in part belonging to the same local authority," so that the services of medical officers in any two or more county or borough asylums should count accumulatively towards pension as if all such service has been in one asylum, each such local authority to contribute its appropriate share. This was proposed by Dr. Farquharson, M.P., before the Standing Committee on Law. The Government objected to it, but I think the more we press our claims the better it will be, because the times are evidently critical, and it won't do for us to be too modest. The next resolution would also be supporting a resolution passed at the last quarterly meeting of the Medico-Psychological Society. "It is also suggested that officers and servants in county and borough asylums should be entitled to claim pensions as a right after a certain length of service with good conduct, and that the medical officers should be placed, as regards this matter, on a footing analogous to that of members of the Civil Service."

The PRESIDENT—Does Dr. Lindsay propose to connect these two propositions with the proposal to abolish the Pensions Committee?

Dr. LINDSAY—Certainly.

The PRESIDENT—In what form?

Dr. LINDSAY—I propose the abolition now if that is seconded by anyone.

Dr. NEEDHAM—I will second it. I quite understood it would be abolished.

The resolution was agreed to.

Dr. URQUHART—Will it be in order to add to Dr. Lindsay's motion that their functions will be handed over to the Parliamentary Committee?

The PRESIDENT—That will follow as a matter of course. What is the resolution that you now propose, Dr Lindsay? Do you wish the Parliamentary Committee to be instructed to act on these lines?

Dr. MURRAY LINDSAY—I do, and I think that if the resolutions are passed copies should be sent to Dr. Farquharson, M.P., and Sir Walter Foster, M.P., who are on the Standing Committee, in order to advance our interests.

The PRESIDENT—I should think it would be more convenient to leave it in the hands of the Parliamentary Committee. I hardly think it will be fair to ask this Association to endorse these words without a discussion on the subject, because there is a very wide diversity of opinion, even on the part of various members of the Pensions Committee themselves, as to whether they shall go so far as to ask that the time of a man's service, in whatever counties he may have been, shall reckon together. My own opinion is that it would be a great mistake.

Dr. MURRAY LINDSAY—The principle originally emanated from our Association, and the British Medical Association took it, with other suggestions, from us.

Dr. YELLOWLEES—Before speaking on this question I should like in a single word to express my appreciation of the great honour you have done me in electing me your next President. I only hope I shall not be found wanting. (Applause.) With regard to the matter now before us, I think that this is a critical time for our county asylums, but I cannot help questioning whether it is the wisest time for them to push the question of pensions. I think that we ought to consider the matter very carefully indeed, and whether we should not be putting ourselves in a false position by allowing it to be said that among the first things we agitated for was our own pecuniary interest. I doubt very much the wisdom of placing ourselves in that position. I entirely agree as to the desirability of getting pensions, but whether this is the wisest time to press the matter should, I think, be well considered before further steps are taken.

Dr. LINDSAY—May I mention one important case that has occurred recently At the last meeting of the Derbyshire County Council a certain resolution was passed subject to the statutory provisions of sections 119, 120 of the Local Government Act. Those are the sections that protect our interests. They refer to the tenure of our position, and to compensation for the abolition of our office. Those sections have not been referred to in any other County Council resolution that I have seen. It is an admission of our claims. Secondly, the resolution goes on to say that no officer hereafter to be appointed shall have a pension, but those who contribute to the police and superannuation fund are exempted. An amendment was proposed by another County Councillor, one of my Committee, whom I had to coach a good deal during the election, for superannuation was the burning question in his district. He proposed that attendants and nurses should be entitled to pensions. I saw that he had omitted from his amendment all reference to medical or other officers. I wrote and asked him for some explanation, and he said if he had included medical or other officers he could have got nothing, so that he was content to get what he could. This shows the necessity of our asserting ourselves, and without delay.

Dr. WHITCOMBE—I think at the present time the subject of pensions has been pushed very much too far in the interests of individual members of the Association. We have throughout the country a new governing body, and we are endeavouring to push them as regards pensions as soon as ever they come into power. The question of pensions before the country has been brought about from the number of large pensions—I do not say too large—that have recently been given. They have followed within a very short space of each other. I think that the members of this Association individually will be much better off, and we shall be better off, if we drop this pension subject, at any rate, for a time.

Dr. MACLEOD—I think the Parliamentary Committee should keep a vigilant look out on the Bills before Parliament to see that we are not entirely debarred

from pensions, or a prospect of pensions, by any statutory enactment. But I think beyond that very little more should be done at present. More time should be given to us to educate our new masters. They will have to see the working of asylums, to come into contact with the officers, and to know what trouble they take about their work. I have no doubt in the long run we shall be better off by simply watching.

Dr. WHITCOMBE—There is just one word of caution with regard to this matter. Mr. Norris's Bill now before the House must be combatted by this Association if it is found to be a bad Bill.

The PRESIDENT—At the last quarterly meeting we undertook to do that. You will presently have announced the result of the inquiries made on that point.

Dr. WHITCOMBE—It is necessary for the Association to make some movement with regard to the matter, and the clause which has been accepted by the Lord Advocate as to pensions in district asylums in Scotland.

The PRESIDENT—We have appointed a Parliamentary Committee, and Dr. Lindsay proposes to instruct that Committee to act in a certain way. That is the only motion before the Association. Several gentlemen have spoken in disfavour of the motion, but have omitted to move an amendment.

Dr. LINDSAY—I am quite willing to withdraw my motion and to leave the Parliamentary Committee with its hands entirely free. I have the interests of the general body at heart, and not my own personal interests alone. I have very great confidence in the Parliamentary Committee that they will exercise due vigilance, and will see after the interests of their associates. (Applause.)

The PRESIDENT—I am very pleased that Dr. Lindsay has withdrawn the motion, because my feeling was a little against it. There is truth in what has been said that we must not force the hands of the County Councils too soon. There is a great deal to be done in the way of education, and if we put the confidence in the Parliamentary Committee which we ought to do, we must trust to its good sense to push the question where it wants pushing, and to leave it alone where it is best left alone.

Dr. WHITCOMBE—I beg to move "That the Council be empowered to grant certificates of proficiency in nursing, after examination, and that a Committee be formed to make arrangements for carrying this into effect." I cannot help feeling that a resolution of this kind, brought before a number of gentlemen who are interested in the treatment of insanity, requires very few words of mine to support it. The present condition of our nursing, we must all admit, is lamentably bad. Insanity, or brain disease, appears to me the only disease where we do not recognize proficient nursing. I do not at all wish to reflect upon the attendants or nurses in asylums. I think we have a very worthy body to deal with, and a body which claims from us all the sympathy and support that we can possibly give to them, but at the present time, and for some time past, they have been a very movable body, and I think if we can give them some common ground to go upon, we may, at any rate, abate that great tendency to change which has been taking place. Independently of this, I feel that it is the duty of every medical man who is treating an insane person to do for that person as much as he would do for any other person suffering from any other physical disease, that is, to give them the benefit of proper and efficient nursing. Our nurses at the present time altogether lack any training in hospital work, asylum work, or ambulance work. I would propose broadly that every medical superintendent or assistant should give proper instruction under these three headings to all his nurses, and having done that we might fairly look to the Association to grant certificates of proficiency. Difficulties, perhaps, may arise, but I would leave those to be dealt with by the Committee, rather than point them out here. There can be no doubt that such a course would do a great deal to bring into our science that medical spirit which we heard so much about some two years ago, but which I fear we have not yet seen brought into our asylum system. These certificates will necessarily be used as a recommendation from one asylum to the other. I

think we are, most of us, in the habit of shunning engagement with nurses who have been in other asylums. It may be proper, or it may be improper to do so, but I think if we have certificates it will, to a great extent, do away with that, and we shall give our nurses a chance of promoting themselves fairly and honourably, instead of treating them as we do now. What would be the position of most of the gentlemen in this room if it was to be said that they would not take a superintendent from another asylum? Those certificates must contain a record in case of dismissal for gross misconduct. In such a case I should say the certificate should be then and there endorsed, and a report made to the Secretary of the Association. With these remarks I will leave the matter in the hands of members.

Dr. MACLEOD—I beg to second that motion. I think anything that would tend to increase the practice of giving systematic training to the nurses and attendants of asylums ought to be encouraged. I think the opportunity of gaining such a certificate would do so; and on that ground, and on that ground alone, I will second it. I do not see anything that can be possibly urged against the motion.

Dr. WIGLESWORTH—I agree with every word that Dr. Whitcombe has said. Our attendants are certainly very movable. Speaking for my own asylum, I think I may say that something like 70 per cent. of the attendants and nurses have not seen more than two years' service. If this can be obviated it will be very desirable, and in order to this end it would be a very good thing to bring attendants together on one common footing. I feel, however, that the only thing that will keep attendants in the asylum is the increase of pay, and unless we get an increase of pay we shall not get any more satisfactory results than we have in the past.

The PRESIDENT—My ideas are entirely in favour of the proposition before us. I quite feel as Dr. Wiglesworth has said, that it will not stop the migration. In fact, in one way it will increase it, because any person who has a certificate will be in a better position to better himself, as it is called, in other spheres. But I must say on the general question as between the specialty we represent and the public, there can be no earthly reason why such a motion as this should not be passed. I believe the greatest mischief is done in this way. A number of attendants are turned off for bad conduct from various classes of asylums; they have no difficulty whatsoever in coming up to the Metropolis, where there are many so-called nursing institutions some of which are as bodies extremely careless of the characters of the people they take on their lists. I may say that the register of a nursing institute contains elements of both heaven and hell in the composition of its nursing staff. I believe there are some most valuable nurses, and on the other hand there are some people not fit to attend on an insane pig, much less an insane person. That is a strong point, and the reason why I should like to see this question thoroughly well pushed would be in the hope that no such attendants should be placed on such a register without being in possession of the certificate of the Association. If we could make the certificate worthy of being obtained, that result would probably follow. We should, undoubtedly, have to take strong measures to see that forgery and misappropriation of these certificates could not be successfully practised, but with that exception I cannot see any reason why this proposition should not be carried, especially as there is the safeguard of a Committee being appointed, who would, no doubt, report if they found it impracticable.

Dr. MURRAY LINDSAY—I quite agree with what has been said by Dr. Whitcombe and others, but there is another danger beside that referred to by the President. We must be very careful not to let those certificates get out of the hands of the medical men. If they are allowed to get into the hands of Committees there won't be much confidence placed in them. I may say, I myself have no great faith in certificates signed by Committees of Visitors with regard to the previous character of attendants. I never would take an attendant upon such a certificate, and we must be very careful to see that these certificates with regard to nurses come from the hands of medical officers.

Dr. SAVAGE—The question of simply examining attendants and saying that because they pass a certain examination they are qualified, seems to me altogether wrong. I would much sooner have a direct certificate from the superintendent, saying, "This is a rather shifty person, who does her work well, but will not stop more than 18 months or two years with you," than I would any amount of parchment in the shape of a certificate. This is being very much felt by the London hospitals. You may get a person who has passed a most satisfactory examination, but who at the same time is thoroughly unsatisfactory. One of the last things I did before leaving home was to sign a protest in connection with the London hospitals with regard to this. The matrons of the London hospitals say, "We are much better judges as to the fitness of nurses for public and private nursing than people who examine them, and are willing to give them written certificates." I must say my feeling has been very strong, that we are only one step, in many respects, above the "Mother Gamps." Mrs. Gamp is represented, undoubtedly, in the asylums far too much, and when one goes to the cultured and refined lady nurses and wants their equivalent in an asylum, one feels the want very largely. Anything that tends in that direction is desirable, and therefore I think Dr. Whitcombe's proposition is satisfactory, because he wishes that a Committee to consider all these points should be appointed. I think the whole thing could be more fairly discussed in a Committee than in open court.

Dr. RAYNER—I think Dr. Whitcombe's proposition is deserving of support. With regard to the objection referred to by Dr. Savage, I think that the persons examined should be only such persons as shall produce testimonials from medical superintendents, or others qualified to give them, that they were fit and proper persons to be examined. The certificate of efficiency should only be granted to those who have a certificate of character.

Dr. CLOUSTON—I rise for the purpose of asking if Dr. Whitcombe would not be satisfied with a motion such as this: "That the question of the systematic training of the nurses and attendants in asylums for the insane, of granting certificates of proficiency, and of keeping a register of such nurses, be referred to the Council of this Association for report." (Hear, hear.) I am quite certain no words of mine can express the strength of the feelings of any experienced medical officer of an asylum in regard to this matter. Our lives would be sweetened and would be prolonged if we felt that all our nurses and attendants did their duty, and were thoroughly educated and trustworthy. Fifteen or sixteen years ago I read a paper before an annual meeting of this Association on this subject, and I am happy to see that it is engaging the attention in a practical way of many men in this country and in America, and also of persons outside our specialty altogether. All these things will help in this matter, but there are a great number of difficulties in regard to it. We all recognize in the first place that the nursing in our department is a very disagreeable business, probably the most disagreeable of any nursing of any disease whatsoever. Then we have the question of pay—the most important question of pay and of promotion, and, in fact, there are a great number of things that the Council of this Association would, I think, take into consideration and would inquire into. I am not sure that we are quite ripe for the stage that Dr. Whitcombe has put before us. If my opinion had been asked fifteen years ago I would have said we were quite ripe for it, but to-day my opinion is we are not quite ripe for it as yet; but I do think a wise and careful report would advance this matter with regard to these three questions—first, education; second, the certificates; and third, the register. I would like very much if Dr. Whitcombe could see his way to so modify his motion as that our Council should go into this question—the Council having power to appoint a Committee of its members, taking in any others that they may think proper, and give us an exhaustive and careful report, instead of going any further just at present.

Dr. BONVILLE FOX—I beg to second Dr. Clouston's suggestion.

The PRESIDENT—I will ask Dr. Whitcombe if he will accept that, and perhaps it will clear the ground.

Dr. WHITCOMBE—I am not in favour of anything that will defer this matter. I think it has been deferred too long already. If a small Committee is formed I think they will go into all these matters, and see that the whole thing is carried out properly. I cannot help thinking that we have gone on a great deal too long, and we have no time to lose. We ought to be doing this, instead of commencing or trying to commence it. I have collected information from all the asylums in England and Wales as to the position of the attendants and nurses with regard to the pay and hours of duty, and I have been astonished to see the immense difference that there is between asylums both in pay and in hours of duty. I think we ought not to let another twelve months pass without giving our nurses and attendants a chance of becoming efficient, and thus of being better paid.

The PRESIDENT—Then Dr. Clouston's proposition will become a distinct amendment.

Dr. BONVILLE FOX—And in that case I beg to second it, with some amount of hesitation, having heard such strongly-expressed views on the opposite side. I presume we are all agreed as to the point at which we are aiming, though possibly disagreeing with the *modus operandi*. I endorse Dr. Clouston's words that our lives would be sweetened and lengthened if we could thoroughly trust our attendants to do their work, and yet there is a very wide difference between a man who knows how to do his work and a man who acts up to that knowledge, and I protest most emphatically, with Dr. Savage, that any parchment certificate, or any diploma, or any examination, cannot give that necessary guarantee. It appears to me that the present examination spirit of the age has, to a great extent, in the last year or two had a check put on it, and that whereas formerly we all thought that an individual who passed a certain examination was thereby necessarily a most excellent person, some little doubt has been lately raised as to whether the examination test is the most satisfactory for practical purposes. I would ask the meeting, How is this scheme going to work? Do we, as superintendents, mean to say that when an applicant comes to us bearing one of these diplomas we are to take him without further inquiry, or that we will make just as minute and careful inquiries as if he had not a diploma? I think before one votes for a general motion of this sort we ought to be very careful of the details, and particularly careful that no person is admitted to any examination until he has been sufficiently long in an asylum for the superintendent of that asylum to have a personal knowledge of the candidate, and not to allow any individual to go out and possibly get a certificate of proficiency in the mere technical part of nursing when his moral character may be of such a nature as to be a great drawback to him. There are a considerable number of small details which could be worked out very much better by the Council, as Dr. Clouston has suggested, than by the motion as it is at present before us. I beg to second the amendment.

Dr. MURRAY LINDSAY—I do not believe that the indefinite appointment of Committees is the best way of attaining the end we have in view. We have all the same interest at heart. As between the original motion and the amendment I have a strong feeling in favour of the amendment. I believe that if referred to the Council the matter will be much more carefully and efficiently dealt with, and sufficiently speedily.

Dr. WHITCOMBE—If Dr. Clouston will leave it to the Council to carry it into effect I shall be quite willing to make that alteration in my motion; but I think any delay in reporting to this meeting is very much to be deprecated.

Dr. URQUHART—I think that there are so many difficulties in the way that it would be well to consider the whole scheme for a year before arriving at any definite conclusion in the matter. Just before coming here I had to examine a number of papers written by the attendants and nurses in my asylum after a course of lectures there, and, to my grief, the best attendants did not produce the best work. The proposal to-day means that we are to put the attendants and nurses in the same position as the medical faculty. They are to be certified as having a certain amount of nursing knowledge, but no committee of any

asylum has ever appointed a superintendent merely by reason of his having a diploma. I think that we ought to postpone the matter until the next annual meeting, in the meantime leaving it to the Council to get every information, and, if possible, to construct a scheme to be laid before us then.

Dr. CLOUSTON—I regret that I cannot quite agree with Dr. Whitcombe. I feel that we want the same thing so very much that I am ashamed to disagree with a motion having for its object that which Dr. Whitcombe has proposed; but I think I would rather wait a year and have a good report, after the question has been thoroughly gone into by the Council, so that I am afraid I must insist on putting my amendment.

The PRESIDENT—Dr. Whitcombe proposes the appointment of a special committee; Dr. Clouston proposes that the matter shall be referred to the Council. I must say I would sooner see this question referred to a special committee. The Council has a great deal to do in the short time at its disposal when it meets. This is a very large question to put before the Council, but a committee no doubt could get just as good information as the Council.

Dr. WHITCOMBE—I feel the very great justice of these remarks. As a member of the Council, I feel that our time is taken up by a good deal of other matters, and that a subject of such importance as this should be dealt with by a small committee, who are likely to do some work, and carry it out thoroughly. I purposely avoided going into details. I cannot help feeling that our Asylum Committees are men of business habits, who look at people according to their worth to a large extent, and I think we shall be placing our attendants in a far better position as regards pay if we make them efficient as nurses to begin with. Then it has been stated that these certificates ought to be a guarantee of morals and everything else. I believe that every member of this profession has had to present his credentials of moral character before receiving his diploma. But when he goes into a public appointment, does the presenting of his diploma mean anything more than that he is a qualified medical man? It does not mean that he is a man of good moral character, or a person who has done this, that, or the other. Certificates of proficiency in nursing are certificates of just as much and no more value than our diplomas are.

Dr. NEEDHAM—Would you be willing to merge the resolution and amendment in a further resolution, substituting the word "Committee" for "Council," adopting the whole of Dr. Clouston's amendment with the exception that for the word "Council" you substitute the word "Committee?"

Dr. CLOUSTON—I am quite willing to do that.

Dr. BONVILLE FOX—The whole point seems to me eminently a subject to investigate and consider; but my opinion at present is we are not ripe to deal with it. If some such arrangement could be made that instead of the Council the Committee should be empowered to investigate the matter and report, but not deal with it, I shall be most willing to agree with it. I presume Dr. Clouston would not ask anybody to agree with the matter at the present time.

Dr. CLOUSTON—That is so. I am quite willing the Committee should be substituted for the Council, and that the amendment should read to nominate such a Committee.

The PRESIDENT—The question now has resolved itself into a narrow compass. The original motion is to start the system and appoint a Committee to carry it out. The amendment is to appoint a Committee to see if the original motion can be carried out, and to report to a further meeting. I will put the amendment: "That the questions—(1) of systematic training of nurses and attendants in asylums for the insane; (2) of keeping an efficient register of such nurses and attendants; (3) of granting certificates of proficiency, be referred to a Committee of this Association to report at the next annual meeting."

The amendment was then put and carried *nem. con.*

It was then put as a substantive motion and agreed to.

The PRESIDENT—The next thing will be for Dr. Clouston to nominate the Committee.

Dr. CLOUSTON—I have taken the liberty of putting down these names :—The President, Dr. Whitcombe, Dr. Bonville Fox, Dr. Savage, Dr. Urquhart, Dr. Campbell Clark, and Dr. Conolly Norman.

Dr. BONVILLE FOX—Would it not be desirable that the Committee should consist of members of the Council, because they would necessarily be in London at the Council meetings, and could then attend the Committee?

The PRESIDENT—There would be some little difficulty in that matter, because as members of Council their time is already occupied, and there would be no reason why this proposition should be referred to members of the Council, any more than the work that comes before the Parliamentary and the Pensions Committees. It appears to me a subject which can be well dealt with by a separate Committee.

Dr. CLOUSTON—And a subject where a great deal of work might be done by correspondence.

Dr. WHITCOMBE—I feel that, in making any proposition for the Committee, it should be a representative one, and therefore I would propose that it contain one member taken from county asylums, one from borough asylums, one from private asylums, one from hospitals, a consultant, and an assistant medical officer. The only objections I have to some of the names you have mentioned are that they reside at such a long distance that I am sure we shall never meet together.

Dr. BONVILLE FOX—I am not in any way anxious to be on the Committee, and I think the suggestion that the Committee should be more or less representative is a very excellent one.

Dr. YELLOWLEES—Might not Dr. Clouston and Dr. Whitcombe make up the list between them, and submit it to us at the afternoon meeting?

This was agreed to.

ELECTION OF OFFICERS.

Dr. YELLOWLEES—It is within the knowledge of every one of us that some eight or nine years ago we altered our mode of electing our officers, the old mode having been felt to leave too much to chance, and to require too much unauthorized preliminary preparation. We then devised and adopted a new mode, by which the Council sends us a nomination paper, which we have always dutifully accepted. That is liable to the misconstruction of seeming somewhat dictatorial, and there has been a subdued grumble very often, not at the names, for nobody could suggest better names than have been put before us, but at the fact that we have very little option but to take them, for nobody will face the invidiousness of writing another name when one has been recommended to us by the Council. Both modes seem to be defective, and the difficulty was this, that anyone who suggested an alteration seemed to reflect upon the gentleman whose name was already on the paper. I therefore took upon myself, since this year it could be no reflection on another, the unpleasant task of putting a motion on the paper with a view to the rectification, if possible, of this difficulty. There has gone abroad the impression that our Council, wise and able men all of them, do not all attend the meetings; that it has been known, even at the Council meeting preceding our annual assembly, that not half the members were present, and that really those lists are sometimes made up by a very small gathering. My motion merely suggests a way out of the difficulty. I do not know that it is the best way. I admit the invidiousness of selection, and I dislike it. Perhaps by acting more strictly upon the Rule we already have the difficulty might be got over, and this list might come to us with greater authority than it does at present. The Rule is that members shall be recommended by the Council. The simplest way would be that the recommendation should be made by the whole Council, whether present at this particular meeting or not, and that the absent members of Council should be able to give their vote as to the names placed upon this list. If that were accepted it would give this paper more weight than it has hitherto had, from the feeling that only a few members of the Council

had been engaged in drawing it up. I think that would really give us a better and wiser selection of officers than if we reverted to the old way. The modification I would suggest is, therefore, a stricter reading of the Rule we already have. It would meet the case if it were hereafter understood that the members to be nominated for office were selected by the vote of the whole Council whether present or absent.

The PRESIDENT—I am extremely unwilling to interfere in this debate; but I must point out that such a suggestion as that made by Dr. Yellowlees is entirely out of order. The Second Section of Chapter II., which deals with the work of the Council, says: "The Council shall meet not less than twice a year, at such times as they shall find it most convenient to appoint." Section I. states that the Council is to manage the affairs of the Association, and at the end of Section II. come these words: "Six shall form a quorum." The obvious meaning is that the matter shall be one of personal attendance, and not by proxy. Then the Third Section says: "The Council shall determine questions by vote, the chairman having the casting vote." That obviously refers to personal attendance. I should be very glad to see any such suggestion as that brought forward by Dr. Yellowlees carried out, but I do not think it can be done in the face of these several sections without the due notice required for altering a Rule, because I am prepared to rule that the suggestion would be such an alteration of the Rule as to require specific notice.

In reply to Dr. Clouston, the PRESIDENT said—What we have to deal with is this, that the Association cannot lay the burden on the Council of consulting its absent members in the way that Dr. Yellowlees has suggested.

Dr. YELLOWLEES—I do not think it can; but I am quite sure that if the Association expresses a wish to that effect the Council would carry out that wish. It is usually open to the Association to suggest to the Council in what way it should do its duty. The Council have a perfect right to do it as they like, but I think it would be a wise thing if they were to accept this suggestion. There can, of course, be no compulsion.

The PRESIDENT—The proposition appearing on the agenda paper is—"That in any nomination by the Council for the election of office-bearers more than one name shall be submitted for the office of President." I do not see how the suggestion carries that into effect.

Dr. YELLOWLEES—The Council may have as many names as they please, and to avoid the invidiousness of choice, the Association leaves it to the Council. I can move the motion as it stands, but it seems a better way that the other suggestion should be accepted.

Dr. URQUHART—I think that Dr. Yellowlees gave notice of motion at the last annual meeting with regard to this point, with a view to the alteration of the Rule.

Dr. MURRAY LINDSAY—I will move that Dr. Yellowlees' motion be not supported. It is not often one finds one's self opposed to Dr. Yellowlees' views, which are generally so sound, but I think in this instance he has made out no case; he has really given no argument in favour of it. He admits that the names selected by the Council have been good names, so that the strongest part of his objection is removed. If the proposition were carried it would tie the hands of the Couucil, and would not be of advantage. For instance, if two names were placed on the paper, a second gentleman being trotted out as a second horse would not feel very comfortable when the voting came on. Besides, it prevents the Council from ascertaining beforehand whether the gentlemen they propose will accept office. I think the present system works very well indeed. I therefore propose that the proposition be not carried.

The PRESIDENT—Is the original motion seconded?

Dr YELLOWLEES—I have not the slightest wish to press my motion. I am perfectly content that the thing should go on as it is, but I know there has been a good deal of feeling for many years, and it was simply on account of that underground grumbling, which is not grumbling against individuals, but against

the system, that I thought our rules might be made to work more smoothly in the way I suggested. But if the meeting does not want it, I will withdraw the whole thing. Can it be said that the suggestion that the Council should take its absent members into consultation is one that does not commend itself?

Dr. RAYNER—I think it has practically been the case that members of Council unable to attend have written to suggest that some name should be submitted to the members.

Dr. WHITCOMBE—I am in full sympathy with Dr. Yellowlees' motion, and therefore I have great pleasure in seconding it. I cannot help feeling that in my own experience remarkably few members of Council have elected the officers of the Association.

Dr. PAUL—I will second Dr. Murray Lindsay's amendment.

Dr. CLOUSTON—I understood that Dr. Yellowlees virtually withdrew his motion.

Dr. YELLOWLEES—I will withdraw it if what Dr. Rayner tells us is the habit of Council. If this is to be the practice of the Council, I am entirely content.

Dr. RAYNER—Every member has not done so, but it has been done. It is very desirable that in some way the general body of the Association should deal with nominations for the whole body of the Council, and I should be quite inclined to support any proposition by which that can be carried into effect. If the members of the Council understood that they always had the opportunity to suggest names for election, I should think that would meet the case.

Dr. YELLOWLEES—I am quite content if that be the understanding.

The PRESIDENT—I cannot see how the understanding can be carried out. At the commencement of the business of the quarterly meeting immediately preceding the annual meeting the Council meets for the purpose of selecting the officers. It is not known what members are coming. The last time I came expecting to find a full Council. There were 28 people entitled to be there, and there were only six present. They were bound to settle the nominations on the spot. They could not telegraph to the absent members to get their instructions. That would be a matter of days. It seems to me that if you carry out Dr. Yellowlees' suggestion you encourage members of Council to remain absent from the Council meetings. We want them to come and vote, not to send their papers and remain away.

Dr. WIGLESWORTH—It is very desirable that the whole Council should be able to express an opinion on these points, but it is also very difficult for provincial men to attend the Council meetings. It involves a considerable expenditure of money and time. Possibly, if we could have our Council meetings held more frequently in the provinces this difficulty might disappear. Surely there are more central places than London at which the majority could attend.

Dr. MURRAY LINDSAY—The Council do get letters containing their opinions from various members of the Council who are unable to attend.

Dr. URQUHART—Would it meet the views of the Association if Dr. Yellowlees withdrew his motion to-day and gave notice of his amended motion for the next annual meeting?

Dr. YELLOWLEES—Oh, no; I do not want the thing to hang fire like that. I am quite content to withdraw my motion after this expression of opinion on the part of the Association that the absent members of Council ought to be consulted. This has been, I think, the general feeling. The Council now know that, and I am quite sure they will carry it out in the way they think best. I have not the least desire that there should be any form of dictation in the matter.

The motion was then by leave withdrawn.

ANNUAL MEETING FOR 1890.

The PRESIDENT—Our next business is to settle the place of the next annual meeting. I think it has been a good rule on the part of the Society that the convenience of the particular officer for the time being of the Society shall be

consulted. I should like to know if Dr. Yellowlees has any views as to the place that he would prefer for the next annual meeting.

Dr. YELLOWLEES—I think it is only natural that I should feel that my own city is the one where I should like the meeting best. At the same time I think I should be wanting in consideration for the Association if I did not say this, that you were in Edinburgh quite lately, and many members were in Glasgow immediately thereafter, and if the Association have any desire for any other place of meeting, I wish to leave the matter unreservedly in their hands. It would be quite wrong if I were to press Glasgow.

Dr. MURRAY LINDSAY—I propose that the next place of meeting be Glasgow.

Dr. HACK TUKE—I beg to second that. I think it is very much more interesting to meet at the asylum which is under the direction of the President. Besides, it is contrary to our custom for a Scotch or Irish Superintendent to preside over an annual meeting in England.

The motion was carried by acclamation.

Dr. YELLOWLEES—I feel doubly honoured. I will do all I can to make the meeting a happy one.

VOTES OF THANKS.

Dr. W. WOOD—I have to move, "That the best thanks of the Association be offered to our honoured friend, Dr. Paul, for the way in which he has conducted our affairs, kept our accounts, and landed us in a satisfactory balance." With regard to that balance, which we desire to apply to the furtherance of the objects of the Institution, our Journal claims to occupy a prominent position amongst scientific productions, and I am sure we can apply our funds to no better purpose than supporting that Journal, and making it even more perfect. I would therefore suggest that in future a larger portion of our income be applied to improving the Journal, especially by means of illustrations, or in whatever way the Editors, in whom we have such perfect confidence, think best. (Hear, hear.)

Dr. MURRAY LINDSAY—I have the greatest pleasure in seconding it. I hope it will not be considered presumptuous on my part to do so. My acquaintance with Dr. Paul extends over 28 years. I was associated with him in a medical capacity in his excellent institution. I know his work, and we are all agreed as to its worth.

The resolution was carried by acclamation.

Dr. PAUL—Mr President and gentlemen: I thank you for the very kind way in which you have expressed yourselves towards me. It is for a great number of years that I have had the honour of being your Treasurer—about 27 or 28—and during the whole of that period I have had so much pleasure in connection with this Society that I shall always look back with the greatest pleasure upon my connection with you after the time comes when I think it right to leave you. I assure you that it at all times affords me great gratification to attend to your business. I greatly appreciate your kindness.

Dr. MACLEOD—I have much pleasure in proposing the thanks of the Association to the Editors for the very able manner in which the Journal has been conducted during the past year. Our money cannot be better spent than on the Journal. We all feel how much is due to Dr. Tuke and Dr. Savage, so that it is quite unnecessary that I should dwell at any length upon the subject. I move, "That the best thanks of the Association are due and are hereby given to the Editors for the able manner in which they have performed their duties." (Applause.)

The resolution was carried by acclamation.

Dr. HACK TUKE—On behalf of Dr. Savage and myself, I must thank you for this kind vote of confidence. It is encouraging for us to hear that the Journal gives satisfaction. It has been our object, more especially of late, to endeavour to dwell in our "Occasional Notes" on those matters which are especially interesting to asylum superintendents. I will only add that the October num-

ber of the Journal will be the last one in 1889, in consequence of our commencing our Journal year in future on the 1st of January.

Dr. NEEDHAM—The duty entrusted to me is one which will be heartily appreciated by the meeting, namely, to propose our best thanks to the General Secretaries. I am sure when I mention the names of Dr. Rayner, who has so efficiently served the Association for a number of years, and who has resigned the office of Secretary after having made nothing but friends in the Association, and not a single enemy, Dr. Savage, who has so kindly undertaken the duties temporarily, Dr. Urquhart, Secretary for Scotland, and Dr. Conolly Norman, Secretary for Ireland, you will all readily concur with me in saying that our very best thanks are due to them. The Secretaries discharge a most important function with reference to the Association. A great deal of work falls upon them, and it is known to you how very admirably these duties are discharged. I beg most sincerely to propose that our best thanks be given to them.

The PRESIDENT—I will venture to say a few words to you with reference to Dr. Rayner. I do think we should make the most of our parting with him. I can speak from personal experience of his devotedness to duty and his punctuality. In all the stirring times through which we have passed—and there have been stirring times with regard to the Local Government and Lunacy Bills—we have felt that we could rely upon his being well posted up, and keeping us well posted up. We who had to work on the subject had a good deal to do, but we knew well that the work of the Secretary was ten times more than that we had to do as individuals. Although we have secured the services of a first rate Secretary, we cannot hope that for years to come he will quite replace the loss we have sustained by the retirement of Dr. Rayner.

The motion was carried by acclamation.

Dr. RAYNER—I beg to thank the Association for the vote they have accorded me, and especially to thank Dr. Needham and Dr. Newington for the very gracious way in which they have proposed it. It has always been a great pleasure to me to serve the Association, and it is a great regret to me to cease serving it. I thank you most sincerely. (Applause.)

The PRESIDENT—There are two gentlemen to whom the thanks of this Association should be conveyed. They are not members, but we owe a great debt of gratitude to them for the work that they have done in the matter of the Lunacy Bill. I refer to Sir John Dorington and Dr. Farquharson. They have done their best to reduce the asperities of the Bill, and to a certain extent they have succeeded. It would be only gracious on our part to instruct our new Secretary to commence his work by informing those gentlemen how deeply sensible we are of what they have done in the interests of the Association.

Dr. NEEDHAM seconded the motion, which was agreed to.

Dr. SAVAGE then read the results of the circulars sent out to members in connection with the Pensions Committee.

The PRESIDENT—I have to announce that eighteen Scotch students last week took the certificates of the Medico-Psychological Society. We must look to what Ireland has done, and we must look to what England has done, and I am afraid, looking to the difference in the respective populations, Scotland leads the way. I have also to make the official announcement that Dr. Hyslop, the Assistant Medical Officer of Bethlem, has gained the Gaskell prize for the year.

AFTERNOON MEETING.

The President gave his Address, which will be found at the commencement of this Number.

Dr. BLANDFORD—I beg to move our thanks to the President for his very valuable and interesting lecture.

Dr. CLOUSTON—I will second the motion. Apart from discussion, we can all recognize that our President deserves a hearty vote of thanks for his valuable and elaborate paper.

The resolution was carried by acclamation.

The PRESIDENT—I thank you heartily for your expression of thanks. If it has been a labour of time it has also been a labour of love to work at this subject. I had little idea until I commenced its study that it was such a large one. I beg now to invite your criticisms to the fullest on any point that may have struck you.

Dr. HOWDEN—The subject of your address, sir, has been so very important that I think I require to read it before I can very much discuss it. What we have been doing is to a certain extent what you said in the commencement of your address, namely, the erection of a hospital for the treatment of those cases which are more amenable to treatment than the rest. My intention, however, was not so much to bring under observation the curable cases as the cases requiring special medical treatment whether curable or not; and the proportion that I went upon was that for a population of 500 we should have a hospital for the treatment of 100 patients. Whether I am right or no in my estimate remains to be proved. I quite agree as to the importance of concentrating our attention upon cases that are more amenable to treatment, and I think in my own case the simple experiments I have made will be at all events interesting, whether successful or not. I do not think statistics show anything with regard to the curability of insanity; it depends very much upon the nature of the cases themselves. The tendency of modern times is to send incurable cases into asylums, and therefore I think our proportion of recoveries is less than it was at the time when really the more acute cases were sent in. To a great extent we must find that our asylums are very overcrowded with old incurable cases that are troublesome to the Guardians to take care of at home, and they are sent into the asylums, not for cure, but to be taken care of.

Dr. SAVAGE—Mr. President, by your command I rise to give time for the other members to collect their thoughts. Not having had that opportunity myself, perhaps you will forgive any shortcomings. First of all, it seems to me that the experiment *has been tried, and has failed.* More than a quarter of a century ago Sir William Gull was superintendent of the separate insane wards of Guy's Hospital. There he had charge of insane cases which had the advantage of the resident medical officer and the visitation of general physicians and surgeons as the case might be. One of the causes of its failure was the opposition of the Lunacy Commissioners, who did not consider the patients were so favourably placed as they were in asylums. We have also to remember that the association of a general medical hospital and a hospital for the insane has been tried since, and has not succeeded. Therefore, it is with caution that one would have to approach it. It seems to divide itself naturally into two great groups. First, it would be better if there could be a receiving hospital in any large city, where cases of acute delirium, whether alcoholic, or due to local causes, or to acute insanity, could be at once and summarily removed; where there would be no stigma of the asylum at all; and that either this hospital should be divided into two wings, or parts, one for the reception of the undoubtedly insane—chronically incurable insane—who should then be transferred to the ordinary asylum; while in the other part should be placed the delirious and acute cases of insanity. There is a great group of cases being constantly admitted into general hospitals. My connection with Guy's Hospital brings before my attention almost weekly some cases on the border line. It is a question whether they are simple delirium or acute delirious mania; whether the individual is suffering from ordinary lead poisoning, from aberration, or from locomotor ataxy. For the reception of these cases that should not be considered insane, there should be a large receiving hospital, such institution not being looked upon as a lunacy hospital at first. The next point referred to by our President is the question of clinical teaching. It seems to me that if you are only to teach clinically from these acute cases, you mislead. Our experience in hospitals is that the most assiduous students of the clinical wards, when they go into general practice look for aneurism of the aorta in every case of pain in the chest, and condescend to nothing, but obscure interpretations of

simple maladies. One meets that so constantly that one feels that if you have only specially selected cases you will mislead your industrious students. But no hospital of this kind would be complete for clinical teaching unless it had some out-patient department as well. Some would say, "Perhaps people suffering from mental disorders will not like to come to you as out-patients." That is not true. In any hospital for clinical teaching we should not only have acute, but chronic cases. There are, of course, one or two most important groups, but I do not know how one would be able to get everything into a way satisfactory for teaching. Of course, as a teacher for some fifteen or sixteen years, one has felt that although the very rich material provided at Bethlem Hospital was extremely good, yet there were defects that any future hospital ought to deal with. For instance, epilepsy. Everyone recognizes some symptoms of a curable or relievable nature, and, as surgeons are now practising with brain surgery more and more, it seems to throw some light upon the cure of these epileptics. Now a hospital should surely have some group for epileptics. Then no hospital would be at all complete unless it had provision for the observation of imbeciles and idiots. Those of us who are teachers who live in London have so far had the advantage of being able to send our students to Dr. Fletcher Beach, who is always willing to teach; but if we are to aim at a hospital where a satisfactory teaching is to go on, I think you must have a larger hospital than has been suggested. Of course, it is absolutely necessary that the time spent by students in such a hospital should be considered as part of their clinical work, or else you will never get them. It would also be of great advantage if the clinical clerks of such a hospital could be drafted on as junior assistant medical officers; and I am not quite sure that the fixity of our assistant medical officers is not injurious to the progress of mental medicine (hear, hear). If we could have our assistant medical officers for twelve months or two years, just as a young fellow goes down as house surgeon to a provincial hospital, and does not expect then and there to become a consulting surgeon, it would be an advantage. In such a case, a young medical student would go down to the hospital and spend a certain time there, while his aim was to become the good, useful, general practitioner. The fact is, however, that directly a man gets into lunacy it is frequently death to his general medical interests, and therefore one feels that it will be a very great thing if the hospitals proposed by the President should form a feeder for young men passing on to assistant medical officers in general asylums, and thence into general practice.

Dr. CLOUSTON—With regard to the new proposal to establish clinical and curable hospitals, I must in the first place make a protest against the injustice with which what has been done in the past has been treated by the new reformers. To read my friend Dr. Batty Tuke's article in the "Nineteenth Century," the article in the "Times," or Mr. Brudenell Carter's speech, you would imagine that we have been absolutely devoid of medical spirit in our department during the last 100 years, that there had been no "Bucknill and Tuke," and that in fact nobody had ever existed who had looked on mental symptoms from a medical point of view. It is a great pity, sir, that that has been done, when addressed to the public in popular journals (Hear, hear), because we all know the public have not the means of correcting this manifest injustice. There has been a certain amount of playing with the public on the assumption of their ignorance in regard to this matter, and against that I desire in the name of this Association most firmly to protest. (Applause.) In regard to the addresses which have been published, we all sympathize with their object, namely, to advance the study of insanity, to have a larger and more philanthropic spirit aroused in the public mind with regard to it; but when we have persons writing as to the establishment of curable and clinical hospitals, and knowing the facts of the case, omit altogether to state to the British public that this experiment has been already tried in Berlin, in Vienna, and in Paris, and make not a single mention of the great experiments that have been made exactly on those lines in these great cities, then it is really time that the public should

be enlightened, at all events in regard to this aspect of the matter. We all know that this very principle has been adopted in Berlin, and that all sorts of neurological complaints have been dealt with at the *Charité*, and that has been going on for the last thirty years. I would ask any man who has visited that department whether the advantages of this plan of treatment in Berlin are not attended with corresponding disadvantages. I wish to say nothing against the system adopted there, but one has to ask, are there no disadvantages in those city hospitals, without grounds, without means of exercise, with exceedingly little decoration, and where the idea is, undoubtedly, a hospital and not an asylum? My own impression, sir, is that the department presided over by our worthy *confrère* in Berlin (Westphal) does not come up to the ideal curable medical hospital you have described. It is the same with the Asylum of St. Anne in Paris, and very much the same in Vienna; the proposers of the new hospitals are bound to face this fact, that the thing has already been tried, and more or less failed. With regard to another matter, it appeals to one's sense of injustice that in talking of the new hospitals the medical site of the present asylums has been absolutely ignored—that you have already existing in our present institutions medical arrangements of all sorts and kinds, which are calculated to have an effect on the mental condition of patients who are treated in them. What does the control, the regulated exercise, the regulated work, the food, amusements, decoration—what do all those things mean if they are not intended to have an effect on the brain and mental condition of the patients? and yet you would imagine from some of the new articles that no such principles have been laid down or carried out in our present asylums. Then, passing on to the clinical aspect of the matter, my friend Dr. Batty Tuke laid down this paradox in a speech that he made at the General Medical Council, that asylums were the worst places for the clinical teaching of mental disease. He did not say what were the best places, and he left us entirely in the dark as to what he would propose himself. In private conversation he assigned this as his chief reason—that you have no chance of demonstrating to your students the early symptoms of mental disease—the only symptoms which the general practitioner has to treat. Now, with regard to clinical teaching, I have always thought the first and greatest thing you can teach your student is this, to see and observe mental symptoms, to become interested in mental symptoms, and to look upon them as examples of disordered function of the brain. If you get this into your student's mind in the first place that every psychological fact that he observes is a thing to be noted and treated as a physician, you have done half your clinical teaching of mental disease. And I would like to know whether he cannot do this in an ordinary asylum? It may sound egotistical, but students by the score have told me that no part of their course was so interesting to them as the clinics of mental disease, that it seemed to take them into a larger field, to enlarge their sphere of vision, to look at things socially, at the conduct and motives from a medical point of view, which they had never done before. Then let us take the ordinary cases of simple mania, such as you recommended to be treated in the new hospital. Is it not the case that each one of us have beautiful examples in our asylums by which we can demonstrate the particular phases of mental disease? and as the disease is passing away, have we not then an opportunity of seeing the sliding scale showing symptoms which are equivalent exactly to the initial symptoms as the patient became ill? In fact, I scarcely think that putting a paradox of this kind before our great learned medical Parliament was in the least fair to our department, or to the present teaching of mental disease. With regard to your own paper, sir, it is replete with thought, full of ability, and of an earnest, practical spirit, that is not only interesting and suggestive to us, but that I believe really will help on the advance that we all desire. And now, before sitting down, I may say personally I should be exceedingly glad to see established in London or elsewhere a few of such hospitals as you have sketched out, which would help the medical mind outside our specialty, and give young men studying mental diseases an abundant field of observation. It did strike me in reading some

of the articles to which you have referred that we shall not only need hospitals, but also a plentiful supply along with the hospitals of great and original minds, who are able to deal with this the greatest problem of medicine, the relationship of mind with brain. I think there is no man in our district who will not earnestly and honestly do his very best, quite irrespective of any influence or prejudice, to help on this movement, if it is going to advance the study of insanity, and to do good to our poor patients.

Dr. BLANDFORD—There can be but one opinion as to the desirability of such a hospital as you have sketched out. One would be very glad to see such a hospital in this city for very many reasons. I have not discussed the question with Mr. Brudenell Carter, but I have discussed it with certain County Councillors, and I must say their ideas are extremely crude on the whole subject. They have a notion that you can build a hospital such as Mr. Brudenell Carter would like to see established as you would build any other hospital with certain wards, and covering as much ground as an ordinary hospital does. They seem altogether to forget that out-door exercise is just as much a matter of treatment as anything else, and that a hospital which had not that means of treatment would be very insufficiently equipped for the cure of insanity. Then there comes the question as to where this hospital is to be, and immediately there starts up the question of £ s. d., because either such a hospital must be some little distance from the centre of London, or it will be a very costly affair to buy the land to build it. But I may remind Dr. Savage, who spoke of the desirability of having a hospital in which some of the cases of acute delirium and so on might be received, and from whence they might be drafted off, if they did not get well, to the county asylum, that we have now all over London those very institutions, in the shape of workhouse infirmaries. A patient is taken in a state of delirium into a workhouse infirmary. He gets well of delirium, and goes away; or, if he is not merely delirious, but is afflicted with insanity, he is drafted off to the county asylum. There is no doubt that these infirmaries might be very valuable, but when one goes to them we see immediately how deficient the whole institution is in anything like medical knowledge of the subject. Patients are sent there—a great many of them in the first instance by magistrates—who may or may not think that they ought to go there, and when they are there they are also more or less under the jurisdiction of magistrates, and of medical officers who have had no teaching in this specialty, and who, I am sorry to say, evince lamentable ignorance of the subject. On two occasions lately I have seen patients who have been discharged from those places as having not enough the matter with them to detain them there who have been as flagrant lunatics as it was possible to be, and one of them in such a suicidal condition that he could not be left alone for a moment. I merely mention this to show that we have to a certain extent those institutions at the present time, and that all we want is that they should be properly officered and properly devoted to this work.

Dr. WHITCOMBE—It is no use shutting our eyes to the fact that we have for a long time been in a rut, and ruts are very difficult things to get out of. I refer to the mode of admission, chiefly. It is not our fault but our misfortune that the law enforces that a patient, in the first instance, is to be taken before a magistrate, and sent to an asylum. Frequently we have our patients saying: "What have I done? What am I sent here for? What am I to be kept in prison for?" It has been stated that the hospital treatment of insane in hospitals such as you have laid down has been tried in this country, and has failed. I am certainly unable to agree with that. The only country that I know of that has tried this to any extent, and that not to the extent you spoke of, is Australia. There they have reception-houses, and Dr. Manning, in his last report, speaks most highly of a reception-house at Darlinghurst. The number of recoveries are stated to be greater than ours. A very large proportion of patients are discharged as not insane without going through any of the paraphernalia of asylum red-tapeism. The subject of hospital treatment has been before me for some time, and I am bound to say I agree most thoroughly with

those principles that you have advocated. But I would go even further still, and would get more outside help than you have described. I think if such cases went through a hospital before going to an asylum the hospital would then command everything that is required as a teaching institution. I hope that before many years are past, we shall have in our county a hospital for the treatment of the insane on such principles as you have laid down. I cannot help feeling that at the present time our treatment of brain disease is not quite what it should be. We must more and more treat it as we do any other clinical disease.

Dr. HACK TUKE—I should like to say a word with reference to some foreign asylums, as Dr. Clouston has referred to those at Berlin and Vienna. I have taken some pains to inquire into the results of the treatment in those at Heidelberg and Strasburg, which I have visited, and where there are special small asylums devoted entirely to acute and supposed curable cases. I have, I am sorry to say, failed to obtain any definitely satisfactory results as to the cures being greater than they are in ordinary asylums, taking into account, of course, the class of patients admitted. I have only recently had a letter from Professor Fürstner, of the Irrenklinik at Heidelberg, an institution which I have twice visited to endeavour to obtain information. Two weeks ago I wrote to him, asking him whether he would kindly give me any definite proof that the cures were larger than they would be if the same class of cases had been treated in an ordinary asylum, and in writing back he simply expresses the general sentiment that he believes it is better to isolate curable from incurable cases, but he gives me no statistics whatever in support of his position. Then, as to Prof. Joly, of Strasburg. Everything is there done as regards treatment, and there is every possible internal appliance, and yet he cannot give me any statistics of recoveries which at all prove that under those circumstances the chances of cure are greater than in an ordinary institution for the insane. It seems to me that there are in the best asylums, and have been for years in Great Britain and elsewhere, appliances which were supposed to be necessary for cure, with all the drugs at hand which are likely to be useful, the baths, etc., and if the case is a curable one, it is quite as likely, I venture to say, to get well in an ordinary asylum in England—a really good county asylum, with a good medical man—as it would be at Strasburg or Heidelberg. In the instances pointed out, there has been very little opportunity of exercise in the open air. The buildings in question are built with a special object in view, simply for curable cases, and without any of the external advantages, with regard to exercise and so forth, which we have in our large asylums. Then, it seems to me, we must recognize the fact that the material on which we have to work is a most unfavourable one, and I believe—although I am quite in favour of making the experiment, and I hope that the London County Council will make the experiment—that their hopes will, to a large extent, be unfulfilled. I believe the material on which you have to work is so exceedingly unfavourable that when you get your 40 per cent. of cures in all cases, after deducting the transfers, you probably have got very near the limit of curability. With regard to the remaining 60 per cent., I am afraid a very small number of that percentage will be cured by the proposed hospitals. Let us hope that it may be different. We may assume that in such hospitals the attention of the physicians will be more immediately directed to the treatment of the patients, and that they will not have their minds distracted by administrative details. That, no doubt, is a strong point. Pathology, too, may be carried out perhaps more definitely than it has been, or, at any rate, the attention of the superintendent who wishes to carry out pathological investigations may not be diverted, as at present, by having to look after the petty details of the hospital; but it does seem to me that the great expectations which are being raised are doomed to disappointment, even including those which fall under brain surgery. No doubt it is very desirable to have everything done that can be done. It was only the other day, I met with a member of the County Council who had visited the Hanwell Asylum. He saw an epileptic patient who had depression of the skull, and he is hoping that that

case may be removed to any hospital which will be established by the London County Council. He is sanguine that that case will be cured. I think most of us will think very differently with regard to that and similar cases. Therefore, I think those who have looked at the material on which you are to work in regard to the curing of patients will approach the subject with great caution, and will be much less likely to be disappointed in the result, which I for one do not expect to be very encouraging in regard to cures. I would only say, in conclusion, that it is extremely difficult to form an estimate on the point referred to by you, sir—the size of a hospital or asylum for curable patients. In fact, I think it is a matter upon which at the present time it is almost impossible to speculate; but I believe, as the result of the somewhat pessimistic view which I am inclined to take with regard to the curability of insanity, that it will in the end be found smaller, rather than larger, than that which you have shadowed forth in your able address, for which I beg, Mr. President, to thank you.

Dr. RAYNER—Statistics are, of course, very deceiving, however well one may attempt to quote them, and when Dr. Tuke alleges against these acute hospitals and clinical hospitals that they cannot show by their statistics that they get any better results than the ordinary asylums, I think that we should take one matter into consideration which is very important. These hospitals probably treat their cases only for a very short time. Dr. Newington, in his Utopia, contemplated that his population should change three times in the year; that the limit of treatment would, therefore, be only four months, so that in comparing statistics of his hospital with the statistics of an ordinary asylum you would really be comparing the recoveries under four months with the recoveries under four months in the ordinary hospital, and that, it seems to me, should be the comparison to be made between your acute hospitals and the general hospitals of which we are speaking; and if the recoveries under three or four months were greater in these clinical hospitals than in the ordinary hospital we should then be able to judge of the results of treatment. If comparison was made in that way you would probably find it was rather in favour of clinical hospitals. I cannot accept Dr. Savage's statement with regard to the experiment at Guy's Hospital as having conclusively settled the question of treatment of insane persons in connection with ordinary hospitals. No doubt it came to an end there, but there was great opposition and great friction from the Commissioners, as Dr. Savage has stated; and I think beyond that there were internecine difficulties which tended to end the experiment. I am still of opinion that general hospitals do neglect their duties very gravely in totally refusing to receive insane cases of any kind except they get them by accident. Of course, as Dr. Savage was saying, he never visits Guy's without finding insane cases, and that is the experience in every hospital in London, which disproves the statement that insane cases cannot be dealt with in hospitals. There is also the fact that the large workhouses, to which Dr. Blandford refers, do habitually treat large numbers of cases in their acute stage without any very great detriment to the other occupants of the infirmaries. If, therefore, it can be done even under such unfavourable circumstances, I believe it can be done satisfactorily on a small scale by making proper and due arrangements. In regard to the comparison of recoveries at the present day with recoveries in past times, from a very careful, or, at all events, very considerable comparison of the admissions in late years in Hanwell with the admissions in earlier days, as far as one can trace by books, I should certainly be inclined to say we do get a larger number of recoveries than they did in the earlier days.

Mr. C. M. TUKE—It is a very great advantage that these schemes should be worked out by members of the profession of the eminence of our President, as they will then have an infinitely greater value than the wild schemes sometimes proposed by perfectly irresponsible theorists, who are most extraordinarily ignorant of their subject. We all know that the public do know very little of the subject, and are very easily misled, and that, of course, we wish to deprecate in every possible way. I was talking only yesterday to a County Councillor, a very intelligent man, whose knowledge of lunacy was, of course,

extremely limited. He, however, wishes to progress with the times, to do the best for the ratepayers and the patients, and in propounding his own ideas he did not progress further than that he thought a very considerable chance should be given to the curable patients, that there should be some scheme arranged by which they should be divided from the incurable. He seemed to think that nothing was done at present in this matter, and it was quite news to him to be told that in all county asylums there were reception rooms and wards for acute cases. I was able to point out to him that medical men did everything in their power, according to what resources they had, to direct attention very greatly to the curable cases, and I think I had the pleasure of rather modifying his views on the subject. It will be some time, certainly, before any very large special hospital can be built up, and I agree with Dr. Tuke that there is a possibility of our over-rating the value of such an establishment. There might, no doubt, be more clinical teaching. I think Dr. Savage has done a great deal in this respect in London, and where county asylums are within easy reach of the Metropolis, I feel certain if the chance was offered many medical students would take short journeys out of town to such asylums, and would derive benefit from the practical instruction given. I cannot agree with one speaker who seems to think we are doing so little in medical treatment. This is a statement we generally hear from the uninformed public, and I think he has been unfortunate in his experience. In my short experience I have seen very considerable medical treatment applied in all sorts of ways—drugs, amusements, massage, electricity, and various schemes for the occupation of patients, tried with the utmost perseverance, and very often, I think, with great success.

Dr. URQUHART—I should like, Mr. President, to add one word of congratulation. We all know your qualifications for the high position you hold, and we are assured by your address to-day that you have not only given your attention to the problems of insanity as represented in your own practice, but are able to speak with a large authority on the problems of insanity at large. I feel, in England, that I belong to the most abused section of a most abused profession. We are buffeted by a storm of eloquence from a great many people who know little or nothing of what they are talking about. If I thought for one moment that I was not treating insanity from a medical point of view, and to the best of my ability as a medical man, I should go home and retire at once. (Applause.) We have been told that reception-houses are found to be valuable in Sydney. I have seen the reception-house in Sydney, and it is not so very different from the reception ward in a workhouse infirmary, where I had the honour of serving, except that the former comes under the surveillance of the doctor who manages the Metropolitan Asylum of New South Wales. But surely that is a very small affair compared with the introduction of hospitals which are to be attended by physicians whose great claim for office is that they know nothing at all about insanity. (Much applause.) Here is a new point of view for the profession. The other day in England there was not a single member of this specialty found worthy to be made a Commissioner! If it had been committed to the care of the Council of this Association they could have picked out from its members, I may say, a dozen most able Commissioners. (Laughter.) And now we are told, in addition to this, by Dr. Batty Tuke (Edinburgh) that an asylum is not the place where insanity can be studied. We know perfectly well that in the large asylums every kind of case is admitted, and every kind of case can be studied. We have yet to be told that the large London hospitals are the worst places in which to study general diseases. It seems to me that in these latter days we are threatened with a deluge of paradoxes, under which we are advised to sit down and to be content to see our work taken from us and handed over to men yet to be trained in the treatment of mental disease. It is most absurd. Surely these schemes have been tried before. It was by the efforts of the men who founded this Association that visiting physicians have been abolished, and if this plan is to arise phœnix-

like from its discredited ashes, I, for one, certainly will give no help towards such a consummation. (Applause.)

Mr. CLARK BELL (New York)—I esteem it a very great honour, and I assure you it has been a peculiar pleasure, to have listened to so able a representation of the subject before us, and while I would not for a single moment, being a lawyer myself, and not a medical man, say anything to you upon a subject so technical in its character, there may be something I can say which may be of interest to you medical men to hear. I should, were I in England, be a very firm supporter of your President in the propositions which he has advanced on the question of medical education. In my profession in America, and among the laity, of whom I am one, there is an idea, and perhaps it may not be proper to speak of it as applying to England, about which we know so very little, that there is a great want of knowledge in the medical profession upon the subject of mental disease. Certain gentlemen on this floor, one of great distinction, have spoken of the treatment of mental diseases in your local infirmaries, under the charge of the medical men of the place. Now, at the Congress of Medical Jurisprudence held in New York City last month, and representing the broad field of forensic medicine, of which the branch to which you devote your lives is so important a factor, we took it upon ourselves, after discussion, to pass a resolution that we believed it to be the duty of every school, both of law and medicine, within the United States to have a chair of medical jurisprudence attached to every university in either branch of the profession, and Professor Rees added as a rider to that general proposition the proposal that that should be made a branch of study in which the student should be examined and pass an examination before he should be entitled to graduation. Now, I do not know whether I am correct, because my knowledge of medical studies and medical proficiency in England is greatly derived from reading, and not from practical observation, but I think I may take the liberty of saying that the reproach which has rested upon the medical profession in America falls with almost as much force upon England, although, perhaps, I should exempt Scotland. But is not the greater part of your trouble the want of what you believe to be competent knowledge upon the subject which you are speaking of among your medical men? Under the law in my State, any man who has a medical diploma, and has practised only three years, is entitled to certify a person into a lunatic asylum. That is what arouses the public mind and makes the laity feel so sensitive—that the personal liberty of the citizen should be so dealt with. I do not know whether under your curriculum of study you would consider that a man who had only the usual medical degree was a competent man upon the subject of mental medicine; but I am inclined to think from some action taken by this body, which has attracted no little attention on our side of the water, that you have had some doubt upon that subject. You have, we hear, established a system by which your young medical practitioners may pass certain lines of study before they are properly qualified to take upon themselves either the practice or the administration of mental medicine. This is a great step in advance. I believe that by medical men in England adopting this system of advancing medical education upon this subject it has made a great step forward, and that you will bring the great body of the medical profession to a higher plane. With regard to the State care of the insane, it is contended by one class of thinkers that all the insane should go into State institutions, of which we have five or six in the State of New York for a population of 6,000,000 people, and under one single head. The number in those City institutions was at the last census a little over 5,000. There is also a movement in favour of county institutions, analogous to those which exist in England. The public feeling is against the State institutions, and the movement to put such institutions into the hands of the Government was defeated in the Legislature. I find you are all county care men here, and on that point you would be against the more advanced popular thought with us.

Dr. YELLOWLEES—I am rather surprised that nobody has expressed the

pleasure I am sure we felt in listening to some of the terse and most characteristic aphorisms into which you, sir, condensed a great deal of wisdom. I have not listened to better aphorisms for a long time. "The more there is to smash, the less smashing there will be;" "Responsibility limits cure;" "They may as well blame ordinary doctors because patients land in the cemetery, as blame us for having incurable cases." I think, sir, these were wise words, and I thank you for them. As to the general question of your paper, which is one full of interest to us all, I share the feeling that the treatment of some nervous diseases in a general hospital is of very great importance, and also of some forms of insanity. I seldom have greater pleasure than when I am asked to go to one of our infirmaries and see an insane case. It is good for the students, and extremely good for the hospital physicians, who, as our friend from America tells us is the case in his country, are not always the wisest people about insanity. As to teaching asylums, that is quite another matter. I have no faith whatever in an asylum got up for the purpose of teaching. I think it must necessarily be a small asylum, and receive only certain forms of illness. It is, therefore, likely to give the students imperfect views of insanity in the wide sense, and I am quite sure, whatever it does for the students, the patients will lose a great deal more than they gain. (Applause.) I am quite sure that no amount of physic or of the wonderfully wise and skilful treatment they are to get from outside physicians will make up to them for the care and treatment that they receive in an asylum. Like Dr. Clouston, I protest against this foolish outcry that has been raised in the "Nineteenth Century," and in the newspapers; and it is the very strangest thing that it should have been raised so largely by an asylum physician. I deprecate Dr. Whitcombe's very strong views. If we are not discharging our duties as medical men in the medical spirit, the sooner we all resign the better, and hand over our duties as guardians and hotel-keepers to laymen who can do them quite as well. (Applause.) I am quite sure the County Council, whatever they choose to do in following such foolish advice, will discover that they can no more prevent the accumulation of incurable cases, by some strange and unknown mode of treatment yet to be revealed to us, than, as you say, we can prevent the filling of the cemeteries. The asylums for curable patients, in connection with others, of which you speak, are entirely different, and I am sure some modification of such an asylum would be a wise thing for our counties, only, unfortunately, it will be too late in the day to adopt it. I have long believed that the right way to care for our county patients would be to provide cure asylums or hospitals for a small number of patients—not more than 200 or 250—near the principal towns, and from these to relegate the incurables as they arose to the home asylum, which may be of any size, and where they would simply get the guardianship and the hygienic conditions which their state required. That I believe to be the proper scheme, but it has never been properly tried, for, unfortunately, county after county follows the old plan of building an asylum which is to be a cure asylum, and which grows with the increasing population and the accumulation of incurables until its character is completely altered. I thus very heartily approve of cure asylums, though I am afraid that the perfect, ideal asylum which you have sketched is not attainable.

Dr. Bott, L.C.C.—I have listened with a very great deal of pleasure to your address, and I availed myself very eagerly of the kind invitation to come here and listen to it to-day. What I have heard will, no doubt, assist me in forming some kind of judgment upon a question which is at the present time exciting a considerable amount of interest in the London County Council. I may say, as a medical man, I differ very largely from my colleagues on the Council as to the views taken by Mr. Brudenell Carter, and also by Dr. Batty Tuke, on this question, and I felt that I should like to have an opportunity of listening to the opinions of those who from experience were capable of forming some sound judgment upon so important a matter. Without attempting in any way to give

any expression of my opinions, which are in such a crude state at present, I may say I am merely travelling about in search of information, and when I have availed myself of the opportunities which are afforded me, I may be able to make use of them in the direction which you have so ably pointed out in your address, for which I am very much obliged to you.

The PRESIDENT—As far as I can find out, there is a general concurrence in any remarks I have made with regard to the position taken up by Dr. Batty Tuke. I have been most careful to avoid saying anything that would hurt anybody's feelings, but I did think that this Association should not meet at this time unless some of the statements that he has made had been controverted. I cannot see how any body of sensible men like the London County Council can take up anything but a hostile position to medico-psychology unless those statements are, as I say, corrected. The same thing applies all over the country. I had the opportunity of lending a copy of Dr. Batty Tuke's article to a country practitioner, a man of sound sense, and he brought it back to me with the remark, "Well, that will set the public altogether wrong on the subject; it will set the public against mad doctors." And that must be the case. Until we have to a certain extent successfully met his arguments, I do not see how we can approach sensible men with any chance of persuading them to do good in this matter. Many arguments have been used in this discussion. They are all of great weight, but I have observed that each argument that has been brought forward has been met by other arguments of equal weight, and so the majority of the points of discussion can be left to answer themselves. There is a general feeling, however, that such experiments as have been tried have not succeeded, notably foreign experiments. I wish to point out that as British asylums do take the lead over foreign asylums, there is no reason why failure abroad should prevent us trying the experiment here. I do not think the experiment has ever been thoroughly tried. We have had the instance of Guy's Hospital brought forward. That was in the days when there was bound to be friction between the authorities of Guy's Hospital and the Commissioners. We have, then, to consider that the lunacy law must be observed. The lunacy law is getting to a certain extent organized, and as we know more of it we can create more opportunity for extending a principle without coming in contact with it. There is one other thing that we cannot afford to forget, and that is, that these hospitals were fore-ordained by Lord Shaftesbury nearly 50 years ago. We have lived to see Lord Shaftesbury's death, but we have lived to see that almost every word that he has said has come true, and I think the very fact that Lord Shaftesbury himself, knowing the subject as he did even in its imperfect state, having recommended these county hospitals, will bespeak from us the warmest and most careful attention. With regard to certification—it is a little way from the subject, but Mr. Clarke Bell wisely suggested that certification should not be undertaken by people who were not qualified to do it. He says that in certain States in America three years' practice is required before a man is qualified to certify. We allow a man of three days' practice to certify. But it is not the medical man who sends the patients at all now, it is the magistrates; so that we need not trouble ourselves about medical certificates. What do we want with medical certificates? We are not the people who have the privilege tendered to us by the Home Secretary—and a blessed privilege, indeed, it was—of sending patients to asylums. It is the magistrate who does this now. He also let fall one or two remarks about the State control of lunatics. That is a question that has lately been discussed in England. Mr. Leighton about eight years ago brought forward a general resolution that the State should undertake the care of all lunatics. There were many arguments used, but the most efficient one in opposition was that the State had undertaken the care of prisoners, and was heartily sick of it, and that they wished they had left it in the hands of the County Boards. I believe each successive Government has

approached the subject of State control in the same way, and the conclusion at which they have arrived has been to leave it alone, and let it be where it is. I thank you very heartily for the kind things which you have said, and for paying the greatest compliment to my paper by raising such a good discussion upon it.

The proceedings then terminated. The members dined at the Ship, Greenwich, and spent a very pleasant evening.

The following were elected members of the Medico-Psychological Association:—

CORRESPONDING MEMBER.

Professor Paul Kowalewsky, Karkoff, Russia.

ORDINARY MEMBERS.

Morgan Finucane, M.R.C.S., Senior Assistant Medical Officer, Hants County Asylum, Fareham.

William Robert Smith, M.D., D.Sc., F.R.S. Edin., 74, Great Russell Street, Bloomsbury Square, London.

Charles John Dabbs, M.R.C.S., Senior Medical Officer, Camberwell House Asylum, Camberwell.

Richard T. Finch, B.A., M.B. Cantab., Resident Medical Officer, Fisherton House Asylum, Salisbury.

George Buchan, M.D., C.M. Glasg., Resident Medical Officer, Town's Hospital and Asylum, Glasgow.

J. T. Callcott, M.D., Medical Superintendent, Borough Asylum, Newcastle-on-Tyne.

BRITISH MEDICAL ASSOCIATION.

LEEDS MEETING, AUGUST, 1889.

Section E.—PSYCHOLOGY.

President.—D. HACK TUKE, F.R.C.P., London.

Vice-Presidents.— { W. BEVAN LEWIS, L.R.C.P., Wakefield.
RINGROSE ATKINS, M.D., Waterford.

Secretaries.— { Dr. J. G. MCDOWALL (Menston Asylum).
Dr. PERCY SMITH (Bethlem Royal Hospital).

WEDNESDAY, AUG. 14.

PRESIDENTIAL ADDRESS.

Provision for the Insane Poor in Yorkshire.

The PRESIDENT, delivering the customary Address, dealt with the Past and Present Provision for the Insane Poor in Yorkshire. His review of the provision made for the insane poor in Yorkshire began with a reference to the Lunatic Hospital at York, generally known as the old York Asylum, founded in 1777, which was now an attractive institution, containing 135 patients on January 1st, of whom 46 were paupers. Taking the estimate of Dr. (afterwards Sir William) Ellis, the proportion of pauper lunatics in 1815 to the population of the country would be one in 1,300, whereas now it was one in 560. The Wakefield Asylum was constructed to accommodate 150 patients on what was

called the H plan, and was opened in November, 1818. The defects in the Wakefield Asylum arose from those who planned it having lived during the earliest stage of development in asylum architecture. In 1846 the population of the Wakefield Asylum reached about 450. In ten years the number advanced to close upon 800, while in 1871, just before the opening of the second West Riding Asylum at Wadsley, the highest number in the history of the institution was reached, 1,494. The number resident on the 1st January 1889 was 1,354. The Wadsley Asylum was built to accommodate 750 to 800 patients, and was opened in August, 1872. On the 1st January last, however, it contained 1,616 patients. While the population of the Riding at the census of 1801 was about half a million, at the present time it was two and a half millions. The consequent demand for additional accommodation for pauper lunatics led to the erection of the Menston Asylum, opened in October, 1888. The buildings now erected would accommodate 840 patients, and those for chronic cases, designed but not erected, another 250 or 300 of each sex, making a total of 1,440 patients. He thought it would have been wise at the present crisis in the history of county asylums, if the magistrates had avoided anything in the way of costly embellishment calculated to prejudice the mind of the ratepayer on entering the building. Without the expenditure of so large a sum, the structure might have been as substantial, while a cheerful appearance and some decoration might have been still given. On visiting the asylum he could not help thinking that it might very possibly be utilized some day, to a certain extent at least, as an asylum for the middle, and even the upper classes, some of whom at present occupied much humbler quarters in private asylums and registered hospitals. (Applause.) To some of the poor labourers of the county it was probable that a more homely—a more homeish—dwelling would have been no less adapted to the comfort and cure of the inmates. He hoped before the remaining blocks were built consideration would be given to avoiding outside passages, seeing that patients residing in them would be of the more or less incurable class. In the North Riding Asylum at York there were on the 1st January last 622 patients; in the East Riding Asylum at Beverley 291 patients; and in the Hull Borough Asylum at Cottingham there were 300 in residence. But besides these, Yorkshire had a share in the provision for the education and training of idiots and imbeciles in connection with the Royal Albert Asylum at Lancaster. Of 553 patients in that asylum 180 belong to Yorkshire. According to the census of 1881 there were in Yorkshire 2,903 idiots and imbeciles, whether paupers or not, who were at the rate of one in 997 of the population, while the proportion in England and Wales was one in 794. As an instance of a serviceable workhouse where lunatics were treated, the President cited that at York, under the charge of Mr. S. W. North. There were 120 patients, and during the last fifteen years the annual admissions have averaged 26. Of 250 discharges during the fifteen years, 82 were sent to their friends, 37 to an asylum, and 131 died. Mr. North calculated that the saving to the ratepayers of the York Union by properly utilizing the workhouse for insane paupers, was not less than £1,000 a year, but no case had been kept in the workhouse to the prejudice of the patient. The number of insane in detention in Yorkshire workhouses was 1,316, or 22·26 per cent. of the 5,879 pauper lunatics in the county, while 330, or 5·58 per cent., were resident with friends or elsewhere. There were 4,265, or 72·16 per cent., in asylums, while the percentage in England and Wales was 69·01 per cent. The recovery rate in the Yorkshire asylums had been 39·69, and in England and Wales 35·60. Unfortunately, medical men had still to endeavour to explain the apparent increase instead of decrease of insanity. And now, looking back over the period their survey had embraced, to the date when the philanthropic and rational movement commenced which led, among other things, to the erection of asylums for the lunatic poor in the county, they naturally asked, Has the object for which they were established been fulfilled? He had no hesitation in answering the question in the affirmative. But it was nevertheless a fact that there was a largely increasing

body who were practically insane, although able to adapt themselves fairly well to their environment, usually relatives of patients already inmates of the asylum, and often far more insane at times than the latter. To the prevention no less than the cure of insanity must their endeavours be bent in the future.

A vote of thanks was passed to the President for his address, on the motion of Dr. MACLEOD (Beverley), seconded by Dr. YELLOWLEES (Royal Asylum, Gartnavel, Glasgow). The latter expressed his belief that the high recovery rates of the past were partly due to the enthusiasm of compilers, and to the satisfaction in the olden days with a lower degree of recovery than now obtained.

Future Provision for the Insane Poor.

The PRESIDENT, having responded, read a paper on the Future Provision for the Insane Poor. (See Original Articles.)

Dr. RINGROSE ATKINS (Waterford) thought boarding-out could be carried on in Ireland under a colonization system. In that country the workhouse authorities did not receive State aid for lunatics, and the insane were quickly transferred to the asylums. Workhouses should be utilized. Time was the test to be applied as to the condition of a patient. Hospitals would largely aid in gaining scientific acquaintance with brain disease. He favoured the building of asylums in blocks, by which means patients could be relegated to their proper quarters. The hurry and worry of this day tended to insanity in more incurable forms, and hence the percentages were not so favourable.

Mr. S. W. NORTH (York) said he had advocated the treatment of incurable patients in workhouses, and was glad the idea was becoming fashionable. Great reform was needed in the early stages of the management of lunatics, as a large number of persons became insane for brief periods, and if they could have probationary treatment they would recover, many cases being due to want of food, intemperance, and a variety of circumstances.

Dr. BEVAN LEWIS (Wakefield Asylum) considered the provision for stemming disease in its incipient stages inadequate. A clinical staff would improve the tone of the asylum medical ordinary staff, whose assistants, too, should be supplemented. If they were to progress, they would require individualized observation and treatment. Boarding-out in Yorkshire he regarded as impossible, owing to the density of the population and the great facility for communication. With an enlargement of the workhouse accommodation, more frequent medical attention, and more skilled nursing, they might trust a large percentage of pauper lunatics to the care of the Guardians.

Dr. DOUGLAS (Leamington), and Dr. WIGLESWORTH (Prescott) having spoken, Dr. YELLOWLEES (Gartnavel Royal Asylum, Glasgow) thought boarding-out in agricultural counties might be encouraged. As to having separate institutions for the treatment of lunatics, Yorkshire had been particularly unfortunate in having distinguished men in care of the insane, so that the evils of giant institutions had not been fully recognized, and hence the West Riding had perpetuated at Wadsley, and now at Menston, what he believed to be a noble but magnificent mistake. We should have brain infirmaries, as well as eye and ear infirmaries, where patients could be first sent for consideration. One of these infirmaries in every large centre in Yorkshire would have been a much wiser and not more costly idea than the erection of the Menston Asylum.

Dr. NICHOLS (Bloomingdale Asylum, New York) said that the State asylums in America corresponded with the county asylums in England. The States were being divided, however, into asylum districts, so as to make the asylums accessible to the patients to be accommodated. The Willard Asylum had been provided altogether for the chronic insane, but this and others were too remote, and they were being supplemented by cheaper buildings.

Dr. MERSON (Hull) thought that boarding-out with relatives would answer in Yorkshire from its success in Hull, where the population was dense. He

feared that persons would not be very ready to take advantage of brain infirmaries. It was quite time the struggle as to the lowest maintenance rate should be put a stop to. (Hear, hear.)

Dr. CHAPMAN (Hereford), Mr. J. PEEKE RICHARDS (Hanwell Asylum), and Dr. SHUTTLEWORTH (Royal Albert Asylum, Lancaster) having spoken, the discussion terminated.

On the Discordant Action of the Two Cerebral Hemispheres in Insanity.

Dr. W. W. IRELAND (Prestonpans) then opened a discussion on the Double Brain and the Discordant Action of the Two Hemispheres in Insanity, and among those who joined in it were Sir J. CRICHTON BROWNE, Dr. WIGLESWORTH, Dr. BEVAN LEWIS, Dr. FLETCHER BEACH (Darenth Idiot School), and Dr. RINGROSE ATKINS.

The PRESIDENT, in summing up the discussion, observed that there was a consensus of opinion that the functioual independence of the cerebral hemispheres was proved, but that this was consistent with mental unity.

THURSDAY, AUGUST 15.

On Optic Nerve Atrophy preceding General Paralysis.

Dr. WIGLESWORTH (Rainhill Asylum) gave his experience as to Optic Nerve Atrophy preceding the Mental Symptoms of General Paralysis of the Insane, and said that while the nerve atrophy was usually a late symptom, it sometimes occurred early. Given a case of primary optic nerve atrophy, for which no cause was apparent, associated with obscure mental symptoms, the probabilities were that the case might turn out to be one of general paralysis; hence this sign might at times give valuable aid in diagnosis.

Dr. PERCY SMITH (Bethlem) and Dr. YELLOWLEES (Glasgow) also stated similar experiences, and were glad Dr. Wiglesworth had submitted his cases.

Dr. WIGLESWORTH also read a paper showing that occasionally fibrinous membranes occurred within the spinal canal of insane patients.

Dr. VOISIN (physician to the Salpêtrière, Paris) said that star-shaped bodies, the result of fibrinous exudation, and encrusted with carbonate of lime, had often been found by him in the subjects of general paralysis; these bodies were adherent to the posterior part only of the spinal arachnoid.

The PRESIDENT said that these two communications gave the lie to those who were so fond of stating that asylum men did no scientific work, though, of course, it was to be hoped that still more would be done. He was glad that Dr. Wiglesworth had been rewarded in a material sense for his good work, by his election to the post of medical superintendent of the Rainhill Asylum.

Treatment of Mental Disease by Hypnotic Suggestion.

Dr. AUGUSTE VOISIN (physician to the Salpêtrière, Paris) made a communication on the Treatment of Insanity and Neurosis by Hypnotic Suggestion, and on the application of the method to the moral and instinctive perversions of backward and imbecile children. He stated that until within the last few years, no serious attempt had been made in this direction, and that it was generally supposed that the insane could not be hypnotized. Dr. Voisin had been able to develop this method in his hospital and private practice. Catalepsy ought to be carefully avoided, because the hypnotized individual ought to be able to preserve the use of his senses, especially of hearing. He was convinced that hypnotism was only useful when it was possible to make use of suggestion; and he was firmly of opinion that, as Braid had said, the hypnotic state originated in the nervous system of the hypnotized person. Having described the basis of hypnotic treatment and of suggestive therapeutics, Dr. Voisin detailed the various categories of the insane with regard to which he had made

observations. By this treatment he had cured persons suffering from hallucinations and delusions, and from disturbances of special and general sensation. Suicidal ideas and acute and furious mania had disappeared under the use of this method. Cases of insanity were cited which had only been calmed after several hours. The treatment had also succeeded in the mania and agitation observed during the catamenia. Patients in this category had even remained asleep for from six to eight days. The method had also succeeded in dipsomania and in morphinomania. Dr. Voisin had also been fortunate enough to cure obstinate cases of onanism in this way, and had applied the method *à la moralisation des enfants dépravés.* He had thus completely transformed their habits of thought, and had brought them to love the good, whereas formerly they had only loved the evil. He had also succeeded in curing amenorrhœa in the insane, which was a frequent cause of nervous and mental troubles; he particularly insisted upon this point as proving it was possible to influence the functions of the sympathetic system. The relapses were not more than one-tenth of the cases cured. Dr. Voïsin hoped that the practice would be tried in England and have good results.

Dr. Yellowlees (Glasgow) confessed himself amazed by these statements, and asked if, at the Wakefield Asylum next day, they could not have demonstrations of the effect of the treatment for the purpose of instruction.

Dr. Macleod (Beverley) asked for details of the process, and wondered if the sane could under the treatment be influenced to pursue vicious courses.

Dr. Langdon Down (London) had witnessed astonishing results at a *séance;* and Dr. Tuckey (London) was convinced there was something in hypnotic suggestion, and spoke of its value, as he had witnessed, in cases of dipsomania, writer's cramp, and vicious habits; while the Rev. Arthur Tooth, of Croydon, he said, had found its influence good upon idle and vicious boys in his school. He (Dr. Tuckey) hoped the treatment would be tried in England. In 100 general cases treated at his own house there were 21 failures. It was an imagination cure, and it was necessary that all the environments should be thoroughly sympathetic.

Dr. Ireland (Prestonpans) thought that Professor Voisin in his enthusiastic nature had claimed hypnotic suggestion as a universal remedy. ("No.") The wonder was that the professor did not try the treatment upon General Boulanger, and infuse into his brain good Republican notions. In England the treatment had been found to do good in a proportion of cases. It could be used for evil purposes, but so could chloroform also.

Dr. Robson (Peterborough) was surprised that so little attention had been given to psychical research in England; while Dr. Percy Smith regretted that attempts to hypnotize at Bethlem had so far failed. Perhaps this was due to the more phlegmatic nature of English as compared with French patients.

After remarks by Dr. Wallis (Whittingham Asylum, Preston), and Dr. Ringrose Atkins (Waterford),

The President said that he hoped that this important question would be pursued more systematically in England than had been the case, and thought that certain suitable young doctors should be set apart for the particular work. Above all things, it should be kept out of the hands of quacks and persons of unscientific training. They should not be too impatient to obtain rapid results. He had, in an article in the "Journal of Mental Science" in 1865, drawn attention to the parallelism between hypnotic and insane delusions, and expressed a hope that hypnotism might prove of therapeutic use, but the results had not been very encouraging. He was now inclined to renew his hopes.

Dr. Bateman (Norwich) read a paper on Hypnotism, with special reference to some experiments at the Salpêtrière, which had been quoted as proving certain theories in reference to the localization of the faculty of speech, and the object of the communication was to show the fallacy of this deduction. Dr.

Bateman concluded that "our knowledge of the exact construction of the visual centre, of the precise distribution of the fibres of the optic tract, and of the relation of the two visual centres to each other, is at present so imperfect as not to justify the originators of the above interesting experiments in quoting them as evidence of the localization of speech in the left hemisphere of the brain."

Professor VOISIN said that for success in the hypnotizing of patients many attempts were frequently necessary. Hence he could not give a suitable demonstration at Wakefield; but his place in Paris was open to all physicians who wished to come. It was immoral to hypnotize healthy persons, being only proper in the case of the diseased. He repeated his statements as to the ailments which could be serviceably treated. For success, varied processes were often necessary.

At the request of Dr. YELLOWLEES, the professor demonstrated his plan of operations, Dr. TURNBULL SMITH (Preston) kindly acting as subject.

The discussion then closed.

Mr. F. ST. JOHN BULLEN gave an analysis of 1,565 post-mortem examinations of the brain performed at the Wakefield Asylum during a period of eleven years. (This paper will appear in this Journal.)

Massage Treatment in Insanity.

Dr. G. H. SAVAGE, in a paper on this subject, said that of late there had been too great a tendency to treat all cases of neurosis by massage. This treatment was not only of no use, but was really harmful in some such cases. It might be taken for granted that it was rarely if ever useful in ordinary cases of insanity; in cases of emotional self-consciousness it was bad, both the solitude and the bed being contra-indicated. In hypochondriacal states it was generally harmful, and in most cases of active melancholia was not useful. Its chief use was in those cases in which the mental depression was associated with physical weakness, loss of flesh, and deficient action of the gastro-intestinal tract. The massage should be continued as long as the general health was feeble, and as long as the appetite was bad. The object was like putting salt in the food given by the stomach-tube to create a desire for food, and then to supply it in a suitable form and quantity. He related a specially interesting case of melancholia cured after four years of profound depression.

The PRESIDENT mentioned a case in which he had found massage useful, and was now trying it in a case of suicidal religious melancholia, with eroticism.*

The section then adjourned.

FRIDAY, AUGUST 16.

Average Development and Condition of Brain Function amongst Children in Primary Schools.

[A series of beautiful sections of the Brain of the Marmoset, stained by Weigert's and Pal's methods, were exhibited by Dr. BEEVOR.

The staining was exquisitely delicate and clear, showing distinctly the difference between the grey and white matter. The process consisted of first hardening the brain in bichromate of potash, embedding it in colloidin, and cutting sections. These were stained by hæmatoxylin and immersed in a solution of ferricyanide of potash and borax, then washed in water and mounted in Canada Balsam. This is Weigert's method.—In Pal's method, after staining in hæmatoxylin and washing in water, the sections were washed in a solution of permanganate of potash. Then the grey matter was bleached white, the white fibres being stained blue or black.]

The PRESIDENT said it might be remembered that at the meeting in Glasgow

* Recovery has now (Sept.) apparently followed this treatment.

last year, the Section of Psychology appointed a committee to conduct an investigation as to the average development and condition of brain function among the children in primary schools. The report was now presented to the section by Dr. Francis Warner, who had acted as hon. secretary to the committee. It stated that owing to the refusal of the London School Board to allow the committee to visit their schools, they had been compelled to confine their observations to other elementary schools in London. They had examined ten public elementary schools, two certified industrial schools, the district pauper schools, Hanwell, and the Asylum for Deaf and Dumb Children in Old Kent Road. The ten public elementary schools contained at the time of the visits 3,931 children, and in the special schools 1,413. The committee took notes in 809 cases, which were divided as follows:—351 showing signs of nervousness, nerve weakness or defect, 184 in which nutrition appeared to be defective, 231 in which mental dulness was reported or observed, 231 cases presenting cranial abnormalities, and 149 with disease or defect of eyes. The different cranial abnormalities were found to be probably due to rickets in some cases, and in others they were head—large (cause not known), head small, dolichocephalic or scaphocephalic, forehead narrow or shallow not included in other groups, bosses on frontal bone or at fontanelle not included in other groups, and other cranial characters not in other groups. The various signs of nervousness observed were nervous hand, weak hand, lordosis, frontals over-acting, orbicular muscle of eyelids toneless, and finger twitches. The chief forms of defective or diseased eyes were squint, hypermetropia, myopia, disease of cornea, disease of lids, cataract, eye lost, and nystagmus.

Dr. WARNER moved the adoption of the report. It did not commit the Section to the facts stated.

Dr. SHUTTLEWORTH, Royal Albert Asylum, Lancaster, who paid a high tribute to the energy shown by Dr. Warner in the preparation of his report, seconded, and Dr. BEACH, Darenth Asylum, Kent, supported the motion.

Dr. IRELAND read a short paper giving his experience of the condition of the children in the school at Prestonpans; and a paper by Dr. SAVAGE, on the same subject, was also read.

The discussion of the question was continued by Dr. YELLOWLEES (Glasgow), who objected to everybody being termed morbid because they had some nerve weakness.

Mr. B. G. WILKINSON, Chairman of the Leeds School Board, was invited to speak, and he said that his presence at the meeting was to show medical men that in any investigations they were making towards a better system of education they would have the sympathy and co-operation of the board. Some years ago there had been a talk about over-pressure in the town, and perhaps there were faults on both sides. In future he hoped that in any work they might have in hand, there would be mutual confidence. (Hear, hear.) He did not like the idea of separate schools for dull children, as had been suggested, as it would be likely to label them for life; but he thought there was something in the idea of a separate class in the school.

The report was adopted, and it was afterwards resolved, "That the Section of Pyschology of the British Medical Association having conducted an investigation and considered their report as to the average development and brain power among children seen in primary schools, urge upon the Government to appoint a Scientific Commission of Inquiry for the further elucidation of the subject."

It was further resolved "That a committee be appointed to study further the conditions of development and brain-power of children, and to bring such studies under the notice of school teachers. That the committee have power to add to their number from outside the medical profession, and to communicate on this subject with various educational bodies. That the committee be authorized to apply for money grants, and to publish a report."

Dr. Warner's paper on the Study of Conditions of Development and Brain-power in Children was taken as read. (See Original Articles).

A Contribution to the Ætiology of Idiocy.

Dr. G. E. SHUTTLEWORTH, Medical Superintendent, Royal Albert Asylum, Lancaster, read a paper on this subject. In it he briefly referred to the various ætiological systems adopted by Séguin, Songelmann, Langdon Down, Ireland, Kerlin, and others, and commented unfavourably upon certain oft-quoted American statements as to the causes of idiocy. He then brought forward his own statistics with regard to the causes of mental defect in the 1,300 cases received into the Royal Albert Asylum, ranging the causes under three heads:—(1) Those acting before birth; (2) those acting at birth; and (3) those acting subsequently to birth. He showed that in the vast majority of cases, two or more factors contributed to the ætiology. In his experience, the most common factors in the first group were—(*a*) tubercular or scrofulous family history; (*b*) an insane or neurotic heredity; (*c*) maternal ill-health during pregnancy, accident, or shock (the mother's account of the last to be received with caution); (*d*) intemperance of one or both parents. Parental consanguinity and inherited syphilis were no doubt often causes, yet not so frequently as had been supposed. Under the second head, the influence of primogeniture was discussed, as also that of instrumental delivery as compared with unassisted protracted parturition. In the third class the most frequently assigned cause was eclampsia (infantile convulsions); but often-times this might be the effect, and not the cause, of nervous instability. The febrile disorders of childhood, and their sequelæ, figured as causes in some 10 per cent. of the author's cases; and cases attributed to injury were almost as numerous. But parents' statements with regard to these matters needed to be taken *cum grano*, as they were naturally disinclined to recognize or acknowledge congenital and ancestral defects; and experience, indeed, led him to deprecate the too hasty acceptance and publication of assigned causes, which had little scientific value till sifted, a process only possible as time brought to light the facts of family history.

Some further Facts respecting the Causation of Idiocy and Imbecility.

Dr. FLETCHER BEACH, Medical Superintendent, Darenth Asylum, Dartford, next read a paper on the above subject. In considering the subject, he said, some causes would be found to exert their influence chiefly before birth, others at birth, and others at some time—it might even be years—after birth. Of all the causes, hereditary predisposition played such an important part that Moreau, of Tours, found it present in nine-tenths, and the author in 76 per cent., of his cases. Next in order, the author would place intemperance, combined with other causes (rarely was imbecility due to one cause), on account of the parents of his patients not at present considering drunkenness a disgrace. A history of phthisis would take the third place, and maternal impressions the fourth. He was of opinion that, owing to the important part taken by hereditary predisposition in the production of the idiocy and imbecility of the patients under his care, convulsions in infancy, epilepsy, fevers, and injuries should take a more prominent position as causes than was accorded them by some whose experience led them to express a different opinion. Tedious labour, consanguinity of parents, and congenital syphilis—especially the latter two—were not such common causes as many supposed. The histories of the cases were obtained from the parents, and corrected by knowledge received from relations and parish officials.

The section shortly afterwards closed its sittings with a vote of thanks to the President, Dr. Hack Tuke.

THE MEDICO-LEGAL SOCIETY OF NEW YORK.

This Society has issued a circular in which it is stated that the recent session of the International Congress of Medical Jurisprudence was highly successful. It perfected a permanent organization, and provided for the selection of an additional Vice-President from each State and Territory of the American Union, and from each foreign province, State, and country who had members in the organization that took an interest in the success of the movement.

The expenses of publishing all the papers read at this Congress, with a record of its transactions and the proceedings at the banquet, will fill a large volume, the expense of which is estimated will be about $700. The Executive Officers were authorized to elect additional members into the organization, the only expense of which is the enrolling fee of $3.00, which entitles the member to the bulletin free.

It is desired that others will unite in this movement with a view of making it International, and promoting the advancement of medical jurisprudence, not alone within the United States of America, but throughout the civilized world.

Those who desire to be enrolled are requested to communicate with either of the undersigned:—

MORITZ ELLINGER,
Surrogate's Office,
New York City.

CLARK BELL,
President,
57, Broadway, N.Y.

ASSOCIATION EXAMINATIONS.

Examination for the Certificate of Efficiency in Psychological Medicine, Bethlem Hospital.

July, 1889.

Examiners:

Dr. Blandford and Dr. Rayner.

PASS EXAMINATION.

T. Gordon Meikle, M.B., C.M. Edin., Bethlem Hospital.

HONOURS EXAMINATION.

(Gaskell Prize.)

Theo. B. Hyslop, M.B., C.M. Edin., Bethlem Hospital.

SCOTLAND.

July, 1889.

PASS EXAMINATION.

Examiner in Edinburgh: Dr. Yellowlees. *Assessor:* Dr. Clouston.
Examiner in Aberdeen: Dr. Rorie. *Assessor:* Dr. Reid.

James Brown Bird, Edinburgh.
William Bullock, Aberdeen.
Arthur W. Carter, Edinburgh.
William Davidson, Aberdeen.
Russell John Drummond, Edinburgh.
Henry Martyn Eames, Edinburgh.
Gerald Fitzgerald, Edinburgh.
Donald Allen Fraser, Edinburgh.

George Hennan, Edinburgh.
Matthew L. Hewat, Edinburgh.
James Monteith, Edinburgh.
James Rannie, Aberdeen.
Robert Renton, Edinburgh.
Thomas Morton Ritchie, Edinburgh.
John Douglas Stanley, Edinburgh.
William Day Stewart, Edinburgh.
Robert Richard Harvey Whitwell, Edinburgh.
James Wilson, Aberdeen.

IRELAND.

JUNE, 1889.

Examiners :

Dr. RINGROSE ATKINS and Dr. CONOLLY NORMAN.

PASS EXAMINATION.

Carlo Raymond Zimmer, M.B., B.Ch., B.A.O., of the Royal University of Ireland.

N.B.—The questions asked in these Examinations will be printed in the next number of the Journal.

The next Examination for England will be held at Bethlem Hospital in December. For other particulars, and for the Scotch and Irish Examinations, apply to the Secretaries, as given in the list of Officers and Members at the end of this number.

Correspondence.

ON THE USE OF RESTRAINT IN THE CARE OF THE INSANE.

To the Editors of the "JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—The questions which interest the public, lay and medical, in this discussion, are: Has there been a return to any considerable extent in the treatment of the insane in the asylums of the kingdom to the use of instruments of restraint which had been all but abandoned? and, if so, Have the results of reverting to old methods been so satisfactory as to fully justify this retrograde step? A mere expression of opinion on the part of any physician that he considers restraint necessary in certain cases is of little moment in the determining of the latter question; for it is evident that another medical man, who approves of the non-restraint principle, may succeed in treating such cases to a successful conclusion by other means. I presume that the most resolute advocates of restraint in its cruellest forms and darkest days would advance similar reasons for their practice—would maintain that the use of these instruments was indispensable in certain cases, and would also object to any interference with their liberty of action. However, more is required than opinion; the question must be submitted to the stern logic of facts.

It was a conviction that a comparison of results by the advocates of the minimum, and those of the more extended use of restraint was

the soundest basis of a correct conclusion, that led me to state my own experience in detail, and to invite Dr. Yellowlees, or other physician who coincided in his views, to record his also. But Dr. Yellowlees appears to think that such a comparison has no bearing on the question. He actually declares that the details of my life's experience in the treatment of the insane with the use of what he obviously regards as an objectionable minimum of restraint "are quite irrelevant!" Had he said that he did not find it convenient or advisable to submit such a return, I could have appreciated his position, but how he can hold that it would be irrelevant is to me incomprehensible. On the contrary, I can assure him that nothing could be more relevant, and that a full and frank statement of the results of his experience with the considerable use of mechanical restraint which he recommends would be a valuable contribution towards the forming of a correct judgment on the subject.

I hope that Dr. Yellowlees will still see fit to publish the results of his experience, and in the same form as I submitted mine in the April number, so that it may be practicable to institute a fair comparison between the two systems of management. To help him to see that such details are thoroughly relevant, I shall briefly refer to the leading ones in my statement in relation to the four classes of the insane in whose treatment he thinks restraint is justifiable. However, as the Doctor is of opinion that I failed to state his views accurately, I shall again quote his own words from his speech at the Edinburgh meeting at somewhat greater length than I did in my former letter. He said, "In what cases is restraint justifiable? Of course, much depends on the personal opinion of the medical attendant. I think it is justifiable, (1) **In cases where the suicidal impulse is intensely strong.* I have no hesitation whatever in putting gloves on these patients, for their own safety and the protection of the attendants in charge of them. (2) *In cases of extreme and exceptional violence.* I think the use of gloves often wise in such cases. Once or twice I have used side-arm dresses, though not for many years. (3) *In extremely destructive cases.* I do not think that a heap of rags over the room is a thing to be proud of for the patient's good. To those I add (4) . . . . *the helpless and incessantly restless patients.* . . . The protection bed which Dr. Lindsay, of Perth, thought so highly of may be useful in these cases instead of restraint. I remember two cases where this mode of treatment was extremely valuable."

In illustration of his practice, he remarked in the course of his speech: "Four of my patients wore gloves last night, and I do not see the shadow of a reason why, if gloves seem desirable, a patient should not wear them."

It is clear, then, that Dr. Yellowlees is of opinion that, by the use of locked gloves, there is a special safeguard against suicide, homicide, or dangerous violence, and the acts of destructive patients. I

* The Italics are his.

ask him then to tell us if his experience shows an immunity from homicide, suicide, or serious injury to patients or attendants greater than that of those who adhere to the non-restraint principle. And also, if he has succeeded by their use in preventing destruction of clothing and glass, or can, at least, show less expenditure for these articles over such a period as a year, than those who do not order gloves for destructive patients.

Surely Dr. Yellowlees will not continue to contend that these questions are "quite irrelevant." Besides holding that they are quite relevant, I am of opinion that the other points of my statement are so also; for it might be supposed that the complete immunity from homicide, suicide, and permanent injury of attendants or patients, which my experience shows was obtained through the supervision of a disproportionate number of attendants, and a generally higher expenditure for management than in Gartnavel, or other asylum where restraint is more freely used. Therefore it seemed to me necessary to mention the weekly cost of patients, the proportion of attendants, rate of recovery, etc., in the establishment under my charge, in order that a full and fair comparison might be made of an asylum conducted with the present minimum, and those managed with the present maximum use of restraint.

Dr. Yellowlees makes light of my reference to the foundation-stone of Gartnavel Asylum. I can assure him from my own recollection that the laying of it was the occasion of a solemn religious service, and was taken part in by the leading and most respected men of an all but by-gone generation belonging to the West of Scotland. Its special feature was, undoubtedly, the tablet in the hollow of the stone bearing the inscription which I quoted, namely, that the asylum now under his charge was erected on the principle "of employing no mechanical personal restraint in the treatment of the patients." When Dr. Yellowlees has seen fit to depart distinctly and definitely from that principle, and thus given it as his opinion that these men were in error, surely, if for no other reason, the high motives by which they were actuated called for a more respectful reference to their work. But he has yet to show that they were in error.

ALEX. ROBERTSON.

16, Newton Terrace, Glasgow,
August 26th, 1889.

To the Editors of the "JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—By your courtesy in sending me a proof copy, I am enabled to reply at once to Dr. Robertson's second letter.

To say that I recommend and practise "the considerable use of mechanical restraint" is a total misrepresentation, which should have been impossible to anyone who read my words in the Journal. If locked gloves be referred to, which are not "mechanical restraint" and which the Commissioners do not regard as such, the statement is

still quite inaccurate. The patients who wear such gloves by night average nothing like one per cent. of those in residence here, and at present only one patient is wearing them out of the whole 495.

The records of Gartnavel for the last 15 years, with an average number resident of 512, are exceptionally free from serious accidents, and there has been only one suicide in the house during all that period. A patient who escaped and was found drowned three weeks afterwards also, I believe, committed suicide. This record is cause for thankfulness, not for boasting, for a fatal accident might occur at any moment in any asylum, which no human foresight could prevent; but I certainly attribute it in some measure to the use of gloves in the intensely suicidal or exceptionally dangerous cases. I deem their use at once a great protection to the patient and a great help to the anxious and often sorely-tried attendants.

Comparisons as to asylum details, such as cost of maintenance, proportion of attendants, frequency of seclusion, use of fireguards, number of accidents or suicides, amount of breakages, destruction of clothing, etc., are always invidious and misleading, since so much depends on the special circumstances of each asylum. Such comparison would be useful and relevant to the present question only if we could compare two asylums which were alike in every respect, except that restraint was the rule in the one and non-restraint in the other. The comparison invited in the present instance would be specially misleading. An asylum, whose total average population for the last five years has been 126 female paupers, cannot be in any way reasonably compared with one whose average population during the same period has been 482, of both sexes, and three-fifths of them private patients.

The question whether the use of restraint is ever beneficial, and therefore right, in the treatment of the insane, might surely in these days be considered on its own merits, and apart from traditional authority or personal bias. There is no other question of medical treatment about which physicians may not legitimately differ, and agree to differ; but let anyone dare to think or act independently as regards this particular treatment, let him dare to say that restraint prescribed by a humane and experienced physician is totally different from the restraint inflicted by cruel or unenlightened men in bygone days, and he at once encounters reproach and blame, as if non-restraint were a rule revealed from heaven, whose universal obligation and absolute wisdom it was little less than sacrilege to question.

Is not an asylum in its very nature a place of restraint as well as of treatment? Is not seclusion but a loose kind of personal restraint? Is it not interference with personal liberty to feed by the stomach-tube, and a yet greater interference to inject poisonous drugs into the tissues? Yet all this may be right and proper and praiseworthy; but if you dare under any conceivable circumstances to fasten the patient's hands, or to swathe him in blankets, you have committed an outrage on humanity, and deserve the direst censure.

This *reductio ad absurdum* obviously needs some excuse, and when reason fails them, the extremists fall back on sentiment. They pose before the public as the special friends and protectors of the insane, declaim against backsliders, and prophesy the re-degradation of the insane and the return of all the horrors of the restraint period,—all because some physicians, who are as humane and benevolent as themselves, and their equals in skill and experience, decline to accept the rule of absolute non-restraint, and believe that in certain rare and exceptional cases, restraint may be the best and the kindest treatment. The excuse is bad and the sentiment mistaken. The abuse of anything can never condemn its proper use, and the tacit assumption that the devotees of non-restraint are kinder, more humane, and more anxiously considerate of the welfare of the insane than their medical brethren, is uncharitable and groundless.

I see I have omitted the foundation stone, but its inscription constitutes no argument, and the suggestion that it entails on me some kind of moral obligation needs no reply. The founders of this asylum were wise and good men, who valued the spirit more than the letter, and could understand that too often the extreme of right is wrong.

Yours faithfully,

D. YELLOWLEES.

Gartnavel, Glasgow, Sept., 1889.

ABSTRACT OF THE LUNACY ACTS AMENDMENT ACT.

The following Abstract of this Act will be found useful. Thanks mainly to the vigorous action of the Parliamentary Committee of this Association, many amendments have been inserted and alterations made, which will make the Act much more acceptable than when it first appeared.* The services of Dr. Rayner, when Secretary, were in constant requisition, and every member of both Houses of Parliament was supplied with the objections entertained by the Association against the Bill. Two deputations to the Government afforded the opportunity of going thoroughly into the points in question, and in many instances the amendments were then and there acquiesced in.

The principal objects of the Act.

I. To furnish safeguards against the improper confinement of persons as lunatics who shall only be detained under the order of an independent authority, to secure speedy treatment, and to protect medical practitioners and others in the performance of their duties.

II. To amend the law as to single patients.

III. To give increased power for administering the property of lunatics.

* The Parliamentary Committee of the British Medical Association, and the Lunacy Committee of the Royal College of Physicians, have also done good service.

IV. To check the establishment of new licensed houses.

V. To enable public asylums to receive private patients.

VI. To consolidate the Lunacy Acts.

In this abstract, "judge, etc.," shall mean judge of county courts, magistrate, or justice of the peace.

"Superintendent, etc.," shall mean superintendent or proprietor of any asylum, hospital, or licensed house, or any person having charge of a single patient.

"Asylum, etc.," shall mean asylum, hospital, or licensed house.

"Commissioners" shall mean the Commissioners in Lunacy.

(Section 1.)

This Act may be cited as the Lunacy Acts Amendment Act, 1889, and shall come into operation, save as in this Act otherwise expressly provided, on May 1, 1890, and it shall not extend to Scotland or Ireland, save as otherwise expressly provided.

Provisions affecting the Admission of Private Patients.

(Section 2.)

No person not being a pauper or criminal lunatic shall be received into any asylum, etc., or as a single patient, unless under a reception order of a judge, etc. The order shall be obtained by private application, accompanied by a statement of particulars and two medical certificates.

(For form of petition and statement, see Forms 1 and 2 in the Schedule.)

(Section 3.)

1. The petition shall be presented, if possible, by the husband, wife, or relative of the alleged lunatic, or if not so presented it shall contain a statement of the reasons why it is not so presented, and of the connection of the petitioner with the alleged lunatic, and of the circumstances under which he presents the petition.

2. The petitioner must be at least 21 years of age, and have seen the alleged lunatic within 14 days before presenting the petition.

3. The petitioner shall himself undertake to visit the patient once at least in every six months, or appoint some one especially to do so on his behalf.

4. The petition shall be signed by the petitioner, and the statement of the particulars by the person making it.

5. One of the medical certificates, whenever practicable, shall be signed by the usual medical attendant of the alleged lunatic. If it is not practicable to obtain a certificate from the usual medical attendant, the fact must be stated in writing by the petitioner to the judge, etc., to whom the petition is presented, such statement to form part of the petition.

6. Each of the two persons who sign the medical certificates shall, separately from each other, have personally examined the

patient not more than seven clear days before the presentation of the petition.

(Note.—In the Urgency Certificate the medical practitioner must have examined the patient not more than two clear days before reception.)

(Section 4.)

1. If upon the presentation of the petition the judge, etc., is satisfied with the evidence of lunacy appearing by the medical certificates, he may make the order forthwith, or he may appoint as early a time as possible, not being more than seven days after the presentation of the petition, for the consideration thereof. Notice of time and place appointed for the consideration of the petition, unless personally given to the petitioner, shall be sent to him by post.

2. The judge, etc., if he think necessary, may visit the alleged lunatic at the place where he may happen to be.

3. The judge, etc., shall have the same jurisdiction and powers as if acting in exercise of his ordinary jurisdiction, and, if he so requires, shall be assisted by the same officers as if he were so acting, and their assistance under this Act shall be considered in fixing their remuneration.

4. The petition shall be considered in private. No one except the petitioner and the alleged lunatic, or any one person appointed by him for that purpose, and the persons signing the medical certificates shall, without leave of the judge, etc., be present.

5. The judge, etc., may make an order, dismiss the petition, or adjourn the consideration of it for any period not exceeding fourteen days, and may summon any persons to attend before him.

6. Every judge, etc., and all persons admitted to be present at the consideration of any petition shall be bound to secrecy, except when required to divulge the same by lawful authority.

(Section 5.)

1. If the petition is dismissed the judge, etc., shall deliver to the petitioner a statement in writing of his reasons for dismissing the same. He shall also send a copy to the Commissioners, and, where the alleged lunatic is detained under an urgency order, to the person in whose charge he is.

2. Any judge, etc., making or refusing an order shall give to the Commissioners, should they require it, a statement of the circumstances under which the order was made or refused.

3. The Commissioners may give such information as they may think proper on the dismissal of a petition to the alleged lunatic or other proper person.

4. Where a petition has been dismissed and a second petition is presented, the person presenting it shall state the facts (to be obtained from the Commissioners) concerning the first petition and its dismissal.

(Section 6.)

1. A reception order (see Form 3) shall be sufficient authority for the petitioner or any person authorized by him to take the lunatic to the place mentioned in the order for his reception and detention therein.

2. The order, petition, statement of particulars, and medical certificates shall be delivered to the petitioner and sent by him to the superintendent, etc., by whom the lunatic is to be received.

3. A reception order shall not continue in force, except the lunatic has been received thereunder before the expiration of seven clear days from its date.

(Section 7.)

The petitioner under whose petition a reception order has been made shall have and be subject to all the powers, authorities, obligations, and liabilities conferred or imposed upon the person signing an order for the reception of a private patient under the Lunacy Acts.

(Section 9.)

1. If a lunatic has been received as a private patient without having been seen by the judge, etc., who made the order for his reception, he shall have the right to be taken before or visited by a judge, etc., other than the judge, etc., who made the order, unless the medical superintendent, etc., shall sign a certificate within twenty-four hours after the patient's reception that such right would be prejudicial to the patient (see Form 5).

2. Subject to any such certificate, the superintendent, etc., shall give a notice in writing to the patient (see Form 6) within twenty-four hours after reception of his right, and shall ascertain whether he desires to exercise the right, and if within seven days he wishes to exercise the right, such superintendent, etc., shall get him to sign a notice to that effect (see Form 7), and shall forthwith post it to the judge, etc., or justices' clerk of the petty sessional division or borough where the lunatic is, who shall arrange as soon as conveniently may be to visit the patient or have him brought before him by the superintendent, etc.

3. The judge, etc., shall be entitled to see all documents, and after personally seeing the patient shall send a report to the Commissioners, who shall take such steps as may be necessary to give effect to it.

4. For the purposes of this Section the jurisdiction shall be exercised by any judge, etc., other than the judge, etc., who signed the reception order, having authority to act in the place where the patient is received.

5. Any superintendent, etc., omitting to perform any duty imposed upon him by this Section shall be guilty of a misdemeanour.

(Section 10.)

1. The justices of every county and quarter sessions borough, at their Michaelmas Quarter and Special Sessions in every year shall

appoint a certain number of their own body to exercise the powers conferred by this Act upon justices of the peace in relation to orders for the reception of private patients.

2. The Lord Chancellor shall have power to appoint justices, if such appointments have not been made, or if he considers the number appointed is insufficient.

3. The Lord Chancellor shall, from time to time, appoint borough justices in boroughs where no separate quarter sessions exist.

4. And appoint a justice to act in place of one unable to attend.

5. The Clerk of the Peace shall publish the names of the justices appointed under this Section.

6. For the purposes of this Section "county" does not include a county of a city or a county of a town (except the City of London).

(Section 11.)

The ordinary jurisdiction of judge, etc., is not to be interfered with by the exercise of any powers under this Act.

(Section 27.)

Subject to the modifications made by this Act the Lunacy Acts shall apply to reception orders and certificates under this Act.

Provisions as to Private Patients in Asylums.

(Section 65.)

1. Lunatics not paupers may be received into any asylum provided under the Lunatic Asylum Act, 1853, and the Acts amending the same, or under this Act, on such terms as to payment and accommodation as the Committee of Visitors may think fit, and all enactments as to the conditions on which such lunatics may be received into hospitals or licensed houses shall apply to them.

2. The amount by which the charge for private patients exceeds the ordinary weekly payment for pauper patients, and any surplus after carrying to the building and repair fund such sums, and providing for such expenses as the Visitors may think proper, shall be handed to the treasurer or treasurers of the local authority or authorities to whom the asylum belongs, and applied in aid of the rates as the local authority may determine.

(Section 66.)

1. The Committee of Visitors of any asylum, with the consent of the local authority, and with the approval of the Secretary of State, may make such alterations and additions to the asylum as they shall think fit for the purpose of providing accommodation for lunatics not paupers.

2. All plans and estimates to be submitted to the Commissioners, who shall report to Secretary of State.

(Section 67.)

1. The local authority of any county or borough, either alone or in union with any other local authority or authorities, may make provision for the reception of pauper and private patients together or in separate asylums, and provide separate asylums for idiots or patients suffering from any particular class of mental disorder.

2. The local authority may erect new asylums or add to existing ones, or purchase any licensed house or other houses and lands suitable for the purpose.

3. Subject to the modifications made by this Act, all the powers and provisions made by the Lunatic Asylums Act, 1853, and Acts amending the same, shall extend to asylums provided under this Act.

Report upon, and visits to, Private Patients.

(Section 29.)

1. The medical superintendent, etc., of every asylum, etc., shall, at the expiration of one month after the reception of a private patient, send to the Commissioners a report as to the mental and bodily condition of the patient in such form as they may direct.

2. The medical proprietor or attendant of every licensed house shall also send a copy of such report to the Clerk of the Visitors of licensed houses in the county or borough in which the house is situate.

3. If the house is situate within the immediate jurisdiction of the Commissioners, one or more of them shall visit the patient as soon as conveniently may be, and report to the Commissioners whether the detention of the patient is or is not proper.

4. If the house is situate in a county or borough for which visitors are appointed, arrangements should be made, on receiving the report, for the medical visitor alone, or with one or more visitors, as soon as conveniently may be, to visit the patient, and if there is any doubt as to the propriety of detaining the patient shall forthwith report the same to the Commissioners, who shall make such further inquiries as they may think necessary to satisfy themselves that the patient is properly detained, or ought to be discharged, or report to the Lord Chancellor with a view to an inquisition.

5. In the case of a single patient, if no Commissioner is available to visit the patient, the Commissioners may send the report to a medical visitor of the county or borough, or some other competent person, and direct him to visit the patient as soon as may be, and report to them whether his detention is or is not proper.

6. The person directed to visit the patient shall have all the powers of a Commissioner, and be paid by them.

7. In the case of a private patient in an asylum or hospital one or more of the Commissioners shall visit the patient, or send a copy of the report to the clerk to the visitors of the asylum, or managing

committee of the hospital, and one or more members of the committee shall visit the patient, and any three of the committee may discharge the patient, or give such directions with regard to him as they think fit.

8. If a patient is seen by one or more of the Commissioners within a month of his reception into an asylum, etc., and examined and reported upon by him or them, no special visit will be necessary.

9. The Commissioners may make an order for the discharge of any patient under this section.

10. The reports under this section shall be in addition to those required by the Lunacy Acts.

Power to appoint Substitute for the Person who signed the Order or Petition.

(Section 37.)

1. The Commissioners may order substitute for the person who signed the reception order for a private patient, or for the person upon whose petition any such order was obtained, any other person who is willing to undertake the duties and responsibilities.

2 and 3. From the date of the Commissioners' order the substituted person undertakes all liabilities, and may exercise all the powers of the person for whom he is substituted, but the latter is not released from any liabilities already incurred by him.

4. An order under this section may be made with or without the consent of the person who signed or obtained the order of reception, but in the latter case the Commissioners shall not make an order during his life until fourteen days after they have given him notice of their intention to consider the matter, together with the name of the person they propose to substitute.

5. The person to whom the notice is given, either in person or in writing, may lay before the Commissioners reasons why such an order should not be made, and the Commissioners may or may not make the order as they think fit.

6. Notice under this section may be sent by post.

Provisions for the Admission of Private Patients in Cases of Urgency.

(Section 8.)

1. In cases of urgency where it is expedient for the welfare of a person not a pauper alleged to be a lunatic, or for the public safety, to place him forthwith under care and treatment, he may be received into an asylum, etc., upon an urgency order* made, if possible, by the husband, wife, or relative, accompanied by *one* medical certificate.†

2. The medical practitioner signing the certificate shall have personally examined the patient *not more than two* clear days before his reception, and state the date of such examination in the certificate.

* See Form 4. † See Forms 8 and 9.

3. The urgency order may be signed before or after the medical certificate.

4. If the urgency order is not signed by the husband, wife, or relative the reasons must be given, also the connection of the person signing the order with the patient, and the circumstances under which it was signed.

5. The person signing the urgency order must be at least 21 years of age, and have seen the patient within two clear days.

6. An urgency order may be made either before or after a petition is presented, or an application made to the Judge in Lunacy. If made before a petition is presented it shall be referred to in the petition, and if after a petition is presented a copy shall forthwith be sent to the petitioner and to the judge, etc.

7. An urgency order shall remain in force for seven days, or, if a petition is pending, until the petition is finally disposed of.

8. Such urgency order and certificate shall be sufficient authority to convey the lunatic to the place mentioned in the order.

9. The urgency order must be accompanied by a statement of particulars.

(Section 17.)

1. Every medical certificate shall be signed by the person making it.

2. Every medical certificate accompanying an urgency order shall contain a statement that it is expedient and for the welfare of the alleged lunatic, or for the public safety, that he should be forthwith placed under care and treatment, with the reasons for the statement (Form 9).

Provisions for the Protection of Persons signing and carrying out Orders, Reports, and Certificates.

(Section 11.)

1. A person who has either before or after the passing of this Act signed or carried out an order or a medical certificate that a person is of unsound mind, or presents a petition after the passing of the Act, or does anything in pursuance of this Act, shall not be liable to any civil or criminal proceedings if such person has acted in good faith, and with reasonable care.

2. If any proceedings should be taken they can be stayed by a summary application to the High Court of Justice.

3. This section shall come into force immediately after the passing of this Act.

Lunatics not under proper Care and Control, or Cruelly Treated, or Neglected.

(Section 13.)

1. Every constable, relieving officer, and overseer of a parish who has knowledge that any person within his district or parish *who is not a pauper and not wandering at large,* is deemed to be a lunatic and is

not under proper care and control, or is cruelly treated, or neglected by any relative or other person having care or charge of him, shall within three days after obtaining such knowledge give information thereof upon oath to a justice specially appointed under this Act.

2. Any specially-appointed justice receiving such information upon oath, from any person whomsoever, that a person within the limits of his jurisdiction is so cruelly treated or neglected, or not under proper care and control, may himself visit the alleged lunatic, or without visiting him, authorize two medical practitioners to examine him and certify their opinion as to his mental state, and shall proceed in the same manner as if a petition for a reception order had been presented to him by the person giving the information with regard to the alleged lunatic.

3. If the justice is satisfied from the two medical certificates, and after such inquiry as he may think necessary, that the alleged lunatic is a lunatic, and is neglected, or is cruelly treated or neglected by any relative or person having charge of him, and that he is a proper personto be detained under care and treatment, the justice may order him to be received into any asylum, etc., to which he might be sent under the Lunatic Asylums Act, 1853, and he shall be conveyed by the person giving the information or by a constable appointed by the justice.

4. The justice may suspend the execution of the order made under this section if he thinks fit for a period not exceeding fourteen days, giving directions for the proper care and control of the lunatic in the meantime.

5. If either of the medical practitioners certify in writing that the patient is not in a fit state to be removed, the removal shall be suspended until the same or some other medical practitioner certifies in writing that he is fit to be removed.

6. A relative or friend shall not be prevented taking charge of a lunatic in reference to whom an order has been made under this section if he satisfies the justice that he will be properly taken care of.

(Section 14.)

1. Where a reception order has been made and suspended, or if the lunatic has been taken to a workhouse under section 3 of the Lunacy Act, 1885, he may be received into an asylum, &c., within 14 days after the date of the reception order without a fresh order or certificates.

2. If the removal has been suspended on account of unfitness for removal he may be received into the asylum, etc., within three days of his being certified to be in a fit state to be removed.

Persons Disqualified from Signing Medical Certificates.

(Section 15.)

The following persons are disqualified from signing medical certificates either in connection with the order of a judge, etc., or an urgency order: The petitioner or person signing the urgency order, the husband or wife, father or father-in-law, mother or mother-in-law,

son or son-in-law, daughter or daugther-in-law, brother or brother-in-law, partner or assistant of the petitioner or person.

(Section 16.)

1. No person shall be received into any asylum, etc., upon any certificate which has been signed by

(*a*) The superintendent or proprietor of the asylum, etc.

(*b*) Any person interested in the payments on account of the patient.

(*c*) Any regular medical attendant of the asylum, etc.

(*d*) The husband or wife, father or father-in-law, mother or mother-in-law, son or son-in-law, daughter or daughter-in-law, brother or brother in-law, sister or sister-in-law, or the partner or assistant of any of them.

2. Neither of the persons signing the medical certificates for the reception of a patient shall be the father or father-in-law, mother or mother-in-law, son or son-in-law, daughter or daughter-in-law, brother or brother-in-law, sister or sister-in-law, or the partner or assistant of the other of them.

3. No member of a managing committee of a hospital shall sign a certificate or apply for the reception of a lunatic into that hospital.

4. Any superintendent, etc., of any asylum, etc., who knowingly receives a patient under an order or certificate signed by any of the foregoing disqualified persons shall be guilty of a misdemeanour.

Persons found Lunatic by Inquisition.

(Section 18.)

Any person found lunatic by inquisition may be sent to an asylum, etc., by order of one of the masters in lunacy in cases where no committee of the person has been appointed.

(Section 48.)

In any case of an inquisition, if a lunatic shall be found incapable of managing his affairs, but capable of managing himself, and is not dangerous to himself or others, it may be specially so found and certified, and the Judge in Lunacy shall thereupon make all such orders relative to the management and application of the estate, including all proper provision for his maintenance, but it shall be left to the discretion of the judge whether he shall consider it proper to make an order as to the custody or commitment of the person.

(Section 49.)

1. In any case of a person found lunatic by inquisition, the Judge in Lunacy being satisfied that the lunatic is cured or capable of managing himself, and is not dangerous to others, although incapable of managing his affairs, may by order supersede the inquisition so far as the same finds the lunatic is incapable of managing himself, and

rescind or vary any order for the commitment of the person of the lunatic.

2. The terms and conditions of an order under this section shall be such as the Judge in Lunacy may think fit.

3. Notice of such order shall forthwith be given to the committee of the lunatic and the person under whose care the lunatic is.

(Section 50.)

1. The medical attendant of every lunatic so found by inquisition before the expiration of one, three, or six years from the commencement of this Act, and before the expiration of every subsequent five years, shall send a report upon the bodily and mental condition to the Masters in Lunacy, certifying that the patient is still of unsound mind and a proper person to be detained under care and treatment.

2. If the report and certificate are not so sent to the masters, unless they are satisfied after inquiry that the lunatic is still of unsound mind, the order for the detention of the lunatic shall determine at the expiration of such period, but shall not affect the commitment of the estate.

3. A Master in Lunacy may order the time within which the order and certificate are to be sent, to be extended for a period not exceeding six calendar months.

4. When any order for the commitment of the person of a lunatic has determined, the Masters in Lunacy shall give notice of it to the committee of the person of the lunatic and to the person having the care of him.

(Section 51.)

Pending the appointment of committees, the masters may by certificate order the expenses of maintenance or other necessary purposes or requirements of the lunatic to be paid, and may direct the proper application of such sum by some person who shall be accountable to the masters.

(Section 53.)

1. The powers of management and administration of the estates of lunatics conferred by the Lunacy Regulation Act, 1853, shall extend to the personal property in Ireland of a lunatic so found by inquisition in England, if it does not exceed £2,000, or the income is not more than £100 a year, and in like manner the Lunacy Regulation (Ireland) Act, 1871, shall extend to the personal property in England of a lunatic so found by inquisition in Ireland, where the amount or income does not exceed such amount as aforesaid.

2. Where a lunatic so found by inquisition in England or Ireland has personal property in Scotland the committee of the estate of the lunatic shall, without further proceedings in Scotland, have all the same powers as to such property or income as might be exercised by a tutor-at-law or a curator bonis to a person of unsound mind in Scot-

land. So also shall a tutor-at-law or curator bonis to a lunatic in Scotland have similar powers over property and income in England or Ireland as might be exercised by the committee of a lunatic so found by inquisition in England or Ireland.

3. The powers conferred by Section 12 of the Lunacy Regulation Act, 1862, and Section 68 of the Lunacy Regulation (Ireland) Act, 1871, shall extend to the property in Ireland or England of the lunatic where the total value does not exceed £2,000, or the income £100 a year.

Provision for a Judge in Lunacy to deal with the Property of a Person, whether a Lunatic or not, incapable of managing his affairs.

(Section 52.)

1. Where a person lawfully detained as a lunatic, or not so detained, and not found a lunatic by inquisition, is proved, to the satisfaction of a Judge in Lunacy, incapable of managing his affairs, the judge, upon the application of the lunatic or other person, may make an order that the next friend or any other person approved by the judge may exercise any powers or do any act which the committee of the estate of a lunatic so found by inquisition could exercise or do on behalf of the lunatic under the Lunacy Regulation Act, 1853, and the Acts amending it.

2. An order under this Section may confer a general authority upon the person named in the order to act on behalf of the lunatic until further order, without further application to the judge.

3. Applications under this Section shall be made in such manner and under such restrictions as may be appointed by the General Orders in Lunacy, and subject thereto as the judge in lunacy may determine.

4. Every person acting under this Section shall be subject to the jurisdiction and authority of the judge in lunacy, as if such person were the committee of the estate of a lunatic so found by inquisition.

Provision for dealing with the Property of a Lunatic under £200.

(Section 54.)

1. Where a lunatic has real and personal property under £200 and no relative or friend is willing to undertake the management of it, any County Court judge having jurisdiction in the place from which the lunatic is sent may, upon the application of the clerk of the Guardians or relieving officer of the Union from which the lunatic is sent, authorize either of them or some other person to take possession of and exercise all the powers which could be exercised by the legal personal representative of the lunatic if he were dead, and the receipt of such person shall be a valid discharge.

2. The judge by whom such order is made may give such directions as he may think fit as to the application of the property of the

lunatic for his benefit, or to reimburse the Guardians for sums expended for his care or relief, or may order the whole or part of his property to be paid into court, to be held and applied for his benefit.

3. The person acting under such order shall account to the judge for his dealings with the lunatic's property.

(Section 55.)

Where a person is in receipt of a pension from any public department, civil service, military or naval service, and is certified by a justice or minister of religion and by a medical practitioner to be unable to manage his affairs, the public department may pay the institution having charge of such person as much as it thinks fit, and pay the surplus to the family of the patient.

Provisions relating to the Admission of Pauper Lunatics into an Asylum, etc., or Workhouse.

(Section 19.)

After the commencement of this Act no pauper shall be received into any asylum, etc., under an order under the hands of an officiating clergyman and an overseer or relieving officer.

(Section 20.)

A justice of the peace shall not sign an order for the reception of any person as a pauper into an asylum, etc., or a workhouse, without he is satisfied that the alleged pauper is either in receipt of relief or in such circumstances as to require relief for his proper care. A person who is visited by a medical officer of the Union at the expense of the Union is deemed to be in receipt of relief (see Form 12).

(Section 22.)

Where a pauper lunatic is discharged from an asylum, etc., not recovered, and the superintendent, etc., shall certify that he is a proper person to be kept in a workhouse as a lunatic, he may be kept there and detained against his will if the medical officer of the workhouse certifies the accommodation is sufficient.

Provisions for the Detention of Lunatics in Workhouses, and their Removal.

(Section 21).

1. Except in the cases mentioned in the Lunacy Act and this Act, no person shall be allowed to remain in a workhouse unless the medical officer certifies in writing (see Form 10)—

(*a*) That such person is a lunatic, with the grounds for the opinion;

(*b*) That he is a proper person to remain in the workhouse as a lunatic;

(*c*) That the accommodation is sufficient for his proper care and

treatment, separate from the inmates who are not lunatics, or that separate care and treatment is not necessary.

2. A certificate under this Section shall be sufficient authority for detaining a lunatic therein against his will for fourteen days from its date.

3 and 4. A justice of the peace having jurisdiction in the place where the workhouse is situated may order the detention of a lunatic for a longer period than fourteen days (see Form 11), the order being applied for by a relieving officer of the Union belonging to the workhouse, supported by a medical certificate from a medical practitioner, not an officer of the workhouse, together with one from the medical officer of the workhouse (see Form 8).

5. The Guardians of the Unicn to which the workhouse belongs shall pay the medical practitioner, not being an officer of the workhouse, such remuneration as they think fit for examining a person for the purpose of a certificate.

6. If in the case of a lunatic being in a workhouse the medical officer shall not sign a certificate required as above, or if an order is not made by the justice for the detention of the lunatic, or if after such order has been made the lunatic ceases to be a proper person to be detained in a workhouse, the medical officer shall forthwith give notice to the relieving officer that a pauper in the workhouse is a lunatic and a proper person to be sent to an asylum, and his removal shall be effected according to the provisions of the Lunatic Asylums Act, 1853.

7. If the medical officer of the workhouse omits to give such notice to the relieving officer, he shall, for each day or part of a day after the first day, and before the notice is given, during which the lunatic remains in the workhouse, be liable to a fine not exceeding £10.

8. A relieving officer who fails to perform the duty imposed upon him by this Section shall be liable to a fine of £10.

9. The Guardians of the Union to which the workhouse belongs may direct any lunatic to be discharged from the workhouse.

10. An asylum provided under the Metropolitan Poor Act, 1867, shall be deemed a workhouse, and the managers have the power of Guardians, and an officer of the asylum shall be nominated to receive notices and take proceedings in place of the relieving officer with regard to a lunatic therein.

(Section 76.)

1. Where a Union is in more than one county and the workhouse of the Union is in one county and the place from which a lunatic was sent to the workhouse is in another county, an order may be made by a justice for the county in which the workhouse is or by a justice for the county from which the lunatic was sent for the removal of the lunatic, either to the asylum of the county in which the workhouse is, or to the asylum of the county from which the lunatic was sent, and

such *latter order* may be made notwithstanding that there may be an asylum of the county in which the workhouse is and no deficiency of room in it, or other special reason why the lunatic cannot be taken to that asylum.

2. Section 94 of the Lunatic Asylums Act, 1853, shall extend to authorize any justice to exercise the jurisdiction thereby conferred in relation to orders for payment of examination, removal, or maintenance and care of a lunatic, and for making the estate of a lunatic applicable for payment of such charges.

3. An order may be made by a County Court judge, upon an application by the Guardians of any Union, for payment of the expenses incurred by them under the Lunatic Asylums Act, 1853, the amending Acts, and this Act, relating to a lunatic, and such order may be enforced in the same way as a judgment of the County Court against any property of the lunatic.

Wilful Misstatements.

(Section 23.)

1. Any person making a wilful misstatement of any material fact in any medical or other certificate or in any statement, or report of bodily or mental condition under the Lunacy Acts, or under this Act, shall be guilty of a misdemeanour.

2. No prosecution for a misdemeanour under this Section shall take place except by order of the Commissioners, or by the direction of the Attorney General, or the Director of Public Prosecutions.

Amendment of Orders and Certificates.

(Section 14.)

1. Certificates and orders, if found defective, may be amended within fourteen days after reception of the patient, with the sanction of a Commissioner, and (in the case of a private patient) the consent of the judge, etc., who made the order.

2. If the Commissioners think any certificate incorrect or defective they may require it to be amended, and if not duly amended to their satisfaction within fourteen days, any two of them may make an order for the patient's discharge.

3. Every amendment of order or certificate shall take effect as if it had been contained therein when it was signed.

Remuneration of Medical Practitioner and payment of Expenses.

(Section 25.)

1. Whenever a justice directs an alleged lunatic, whether a pauper or not, to be examined by any medical practitioner, he, or any other justice having jurisdiction in the place where the examination took place, may make an order upon the Guardians of the Union, named in the order, for payment of such reasonable remuneration to the medical practitioner, and of all such other reasonable expenses in and

about the examination and the inquiry, whether an order for the reception of the alleged lunatic ought to be made, and also if an order for the reception is made for payment of such reasonable expenses as the justice may think fit.

2. The Guardians may recover any sums so paid from the estate of the lunatic or the person liable for his maintenance.

(Section 26.)

1. Any two justices may order a relieving officer, or treasurer, or some other officer of a county or borough to seize any money or property belonging to a lunatic, if he has any real or personal property more than sufficient to maintain his family chargeable to any union, county, or borough, and sell so much of it, or receive so much of the rents as they think sufficient to pay any charges incurred or to be incurred for the examination, removal, maintenance, and care of the lunatic.

2. Any trustee or company having property belonging to a lunatic who shall pay to a relieving officer, treasurer, or county or borough officer any money to repay the charges under this Section (with or without an order under this section), their receipt shall be a good discharge.

Notice to be given of Change of Classification of a Patient.

(Section 28.)

When a pauper patient becomes classified as a private patient his discharge may be ordered by the person who could have legally done so, if the patient had been admitted as a private patient, or failing such person, and no other person able or willing to act, then by the Commissioners.

Duration of Orders for the Reception of Patients.

(Section 30.)

1. Any reception order, whether it relates to a pauper or not, dated after or within three months before the commencement of this Act, shall expire at the end of one year from its date; and any such order dated three months or more before the commencement of this Act, shall expire at the end of one year after the commencement of this Act, unless such orders respectively are continued as hereinafter provided.

2. In the case of any asylum, etc., the Commissioners may direct the reception orders to expire on any quarterly day next after the days on which the orders would expire under the last preceding Section.

3. An order of transfer shall not be deemed a reception order, the patient being detained under the original reception order, which (unless continued) shall expire as hereinafter provided.

4. An order for the reception of a patient, whether a pauper or not, into an asylum, etc., shall remain in force for one year, after that for

two years, and after that for three years, then for successive periods of five years, provided the superintendent, etc., report specially to the Commissioners as to the bodily and mental state of the patient, and certify that the patient remains of unsound mind, and is a proper person to be detained under care and treatment. This special report must be sent not more than a month, and not less than seven days before the end of each period.

5. The person making the special report shall give the Commissioners any further information concerning the patient they may require.

6. If, in the opinion of the Commissioners, the special report does not justify the accompanying certificate, then —

(*a*) In the case of a patient in a hospital or licensed house, if the Commissioners, after further inquiry, are dissatisfied, any two of them may order his discharge.

(*b*) In the case of a patient in an asylum the Commissioners shall send a copy of the report to the clerk of the committee, and after investigation any three of them may discharge the patient, or give such directions respecting him as they may think proper.

7. Any superintendent, etc., who detains a patient, knowing that the order for his reception has expired, shall be guilty of a misdemeanour.

8. The special reports under this Section may include and refer to more than one patient, their form to be directed by the Commissioners, with the Lord Chancellor's approval.

9. A certificate from the secretary to the Commissioners that the order has been continued will be sufficient evidence of the fact.

Provisions for Discharge and Removal of Patients.

(Section 31.)

1. Two of the Commissioners, one of whom shall be a medical, and the other a legal Commissioner, after *one* visit to a patient in any hospital or licensed house as a single patient, may order his discharge within seven days of their visit.

(Section 41.)

The members of any Committee of Visitors for any asylum appointed by a County Council, whether justices or not, shall have the same powers and jurisdiction in relation to transfer and discharge of patients as vested in any members of a Committee of Visitors by the Lunatic Asylum Act, 1853.

(Section 43.)

1. When the Commissioners have made any order of discharge, they shall serve it upon the superintendent, etc., and give notice of such order.

(*a*) In the case of a private patient, to the person who signed or

obtained the reception order, or who made the last payment on account of the patient.

(*b*) In the case of a pauper to the Guardians of the Union, paying for his maintenance, or if chargeable to a county or borough to the Clerk of the Peace or Clerk of the borough, respectively.

2. Any person detaining a patient, after being served with an order of discharge, beyond the date fixed in the order, shall be guilty of a misdemeanour.

Removal for Health or on Trial and Transfer.

(Section 32.)

1. The consent of *one* Commissioner shall be sufficient for the exercise of the powers conferred by Section 86 of the Lunacy Act, 1845, Sections 20 and 22 of the Lunacy Act, 1853, and Section 38 of the Lunacy Act, 1862.

2. The medical superintendent of a hospital, or the medical superintendent or proprietor of a licensed house may, of his own authority, permit a patient to be absent from such hospital or house for a period not exceeding forty-eight hours without giving notice of such absence to the Commissioners, and during such absence the reception order shall remain in force.

Chargeability of a Lunatic becoming Pauper.

(Section 33.)

1. Where a lunatic in an asylum, etc., becomes destitute he shall be deemed chargeable to the Union from which he was brought until it is ascertained that the lunatic has a settlement in some other Union, or that it cannot be ascertained in what Union the lunatic was settled. The superintendent, etc., shall forthwith give notice to the authority liable for his maintenance that the lunatic has become destitute.

2. The words "if any pauper lunatic be not settled in the parish *from* which" are hereby substituted for the words "if any pauper lunatic be not settled in the parish *by* which" in Section 98 of the Lunatic Asylums Act, 1853.

Provisions for Single Patients.

(Section 31.)

1. Two of the Commissioners, one of whom shall be a medical and the other a legal Commissioner, after *one* visit to a single patient may order his discharge within seven days of their visit.

2. Upon the death of a person having charge of a single patient the Commissioners may order the transfer of the patient to the care of some other person.

3. The Commissioners, or any two of them, may at any time order the removal of a lunatic from the care of any person under whose care he is, as a single patient, to the care of some other person, or to any asylum, etc.

(Section 34.)

1. Any two Commissioners may direct that the medical attendant of a single patient shall cease to act in that capacity and that some other person be employed in his place.

2. If the person having charge of the patient fails to give effect to the Commissioners' direction he shall be guilty of a misdemeanour.

3. One or more of the Commissioners shall, once at least in every year, visit every unlicensed house in which a single patient is detained, and report to the Commissioners on the treatment and state of bodily and mental health of the patient.

4. Any Commissioner may inspect every part of the house and grounds belonging thereto.

5. If the person having charge of a single patient refuses to show any Commissioner, at his request, any part of the house or grounds he shall be guilty of a misdemeanour.

Under special circumstances the Commissioners may allow more than one patient to be received as single patients into the same unlicensed house.

(Section 35.)

Any person who for payment takes charge of or receives to board or lodge any person as a lunatic shall be deemed to be a person deriving profit from the charge of a lunatic within the meaning of the Lunacy Act, 1845.

(Section 36.)

The notice by Section 19 of the Lunacy Act, 1853, required to be sent upon the recovery of a patient shall state that, unless the patient is removed within seven days, he will be discharged, and he shall be forthwith discharged without further notice.

Provision for any Person to apply to have any Patient Examined.

(Section 38.)

Any person, whether a relative or friend or not of a patient who is detained in any asylum, etc., may apply to the Commissioners to have such patient examined by two medical practitioners, and if the Commissioners are satisfied that it is proper to grant such order they may do so. If, after two separate examinations with an interval of at least seven days between such examinations, the two medical practitioners certify that the patient may, without risk to himself or injury to the public, be discharged, the Commissioners may order the patient to be discharged within 10 days of the date of the order.

Provisions concerning Boarders.

(Section 39.)

1. The superintendent or proprietor of a licensed house may, with the previous consent in writing of two of the Commissioners, or

where the house is licensed by the justices, of two of the justices, receive and lodge as a boarder for the time specified in the consent any person who is desirous of voluntarily submitting to treatment. After which time, unless extended by further consent, he shall be discharged. Any relative or friend of the patient may be received under the same conditions.

2. The Commissioners' or justices' consent shall only be given on the application of the intending boarder.

3. The number of patients and boarders in a hospital or licensed house shall at no one time exceed the number for which the hospital is certified or the house licensed.

4. Every boarder shall, if required, be produced at the visits of the Commissioners or justices.

5 and 6. A boarder may leave a licensed house by giving 24 hours' notice to the superintendent or proprietor of his intention to do so, and if prevented from so doing shall be entitled to recover £10 from the superintendent or proprietor for each day, or part of a day, during which he is detained.

Provision for the Maintenance of Pauper Lunatics taken charge of by Relatives.

(Section 40.)

1. Any relative or friend of a pauper lunatic confined in an asylum may apply to the Committee of Visitors to have the said lunatic delivered over to him, and the committee may, upon being satisfied that the guardians of the Union to which the patient is chargeable approve, and that the lunatic will be properly taken care of, order him to be delivered over accordingly. In case the place to which the lunatic will be taken is outside the limits of the union a justice having jurisdiction in the place shall also approve.

2. Where such order is made, the authority liable for the maintenance of the lunatic shall pay to the person to whom he is delivered over, a sum for his maintenance not exceeding his cost in the asylum.

3. As long as the allowance is paid, the medical officer of the district of the Union in which the patient is resident shall visit him once in three months, and his report, stating whether the lunatic is properly taken care of and may remain, shall be transmitted within three days to the Committee of Visitors, and also be laid before the guardians.

4. Any two of the visitors may at any time order the return of the lunatic to the asylum.

Provision with regard to Lunatics in Private Families and Charitable Establishments detained without Order and Certificates.

(Section 42.)

1. The Commissioners may require any person who keeps a lunatic receiving no payment, or the superintendent of any charitable or

religious or other establishment detaining him, to send to them at such times as they may appoint reports by a medical practitioner of the mental and bodily condition of the patient, and such particulars concerning him and his property as they may think fit.

2. The Commissioners may visit any such patient at any time and exercise all the powers (except those of discharge) given them as to persons confined in any asylum, etc.

3. They may also report upon the case to the Lord Chancellor, who may discharge the patient, or remove him to an asylum, etc., and the expenses of his removal and maintenance shall be paid by the guardians of the Union in which he was found. The guardians shall have power to recover any such expenses from the lunatic and his estate or from the person liable for his maintenance.

4. Where the Lord Chancellor orders the patient into an asylum, any two justices of the county or borough in which the asylum is, may use the power given them by the Lunatic Asylum Act, 1853, of making the lunatic's property available for his maintenance as a pauper.

5. All reports and particulars under this Section shall be kept by the Commissioners and subject to inspection only by order of the Lord Chancellor.

Power to remove Alien Lunatic to his own Country.

(Section 44.)

1. In the case of an alien (not being a criminal) whose friends wish him to be removed to his own country, on application by a member of his family or a friend, the Commissioner may inquire and report to the Secretary of State.

2. If the Secretary of State is satisfied the removal will be beneficial to the patient, he may, by warrant, order him to be delivered to the person applying for him, and removed to his own country.

3. A warrant under this Section shall be authority for the master of any vessel to receive, detain, and convey him to his destination.

Mechanical Means of Restraint.

(Section 45.)

1. Mechanical means of bodily restraint shall not be applied except for surgical or medical treatment, and to prevent the lunatic from injuring himself or others.

2. In every case a medical certificate shall be signed, describing the means used and the reasons for it (See Form 16).

3. The certificate shall be signed by the medical superintendent etc., of any asylum, etc., and in the case of a workhouse by the medical officer.

4. A full daily record of every case shall be kept and sent to the Commissioners quarterly.

5. In the case of a workhouse, the record to be kept by the medical officer, and copies sent to the clerk to the guardians.

6. "Mechanical means" shall be defined by the Commissioners.

7. Any person who wilfully contravenes this Section shall be guilty of a misdemeanour.

Letters of Patients.

(Section 46.)

1. The superintendent, etc., of every asylum, etc., shall forward unopened all letters written by any patient (*private* or *pauper*) and addressed to the Lord Chancellor, or to any Judge in Lunacy, or to a Secretary of State, or to the Commissioners or any Commissioner, or to the person who signed the order for the reception of the patient or on whose application or petition such order was made, or to any visitors, or visiting committee, of the asylum, etc., in which the patient may be, and may also at his discretion forward any letter to its address written by a *private* patient.

2. Every superintendent who makes default in complying with the obligation imposed by this Section shall be liable for each offence to a penalty not exceeding £20.

(Section 47.)

1. Under the direction of the Commissioners in every asylum, etc., where there are *private* patients, printed notices shall be posted up setting forth —

(*a*) The right of every *private* patient to have any letter written by him forwarded in pursuance of the last preceding Section.

(*b*) The right of every private patient to request a personal and private interview with a visiting Commissioner or visitor.

2. The notices shall be posted so that every private patient shall be able to see them.

3. The visiting Commissioner or visitors may direct where the notices are to be posted.

4. Any superintendent, etc., of an asylum, etc., who does not carry out any directions as to such notices given by the visiting Commissioners or visitors shall be liable to a penalty of £20 for each offence.

Restrictions upon New Licences.

(Section 56.)

1. If the Commissioners, or in the case of a licensed house the justices, are of opinion that the licensed house has been well conducted by the licensees, they may from time to time renew the licence for it to the licensees or their successors in business.

2. If at the passing of this Act the licensees of any house have made arrangements to establish a new house, the Commissioners and justices respectively may grant a new licence for the new house in

place of the old one if they think it will be as well suited for the purpose as the existing house, and that the latter has been properly conducted.

3. At any time after the passing of this Act the Commissioners or justices, if satisfied that it would be to the comfort and advantage of the patients in any licensed house, may substitute another in its place under the same conditions and restrictions as may have existed in respect of the first-named house.

4. In the case of joint licensees or proprietors wishing to carry on business apart, the Commissioners or justices may grant them separate licences for such number of patients (not exceeding in the aggregate the number allowed by the joint licence) as they may agree upon or as the Commissioners or justices may determine.

5. Where the licensee of a house is a medical man in the employment of the proprietor as his superintendent, the license shall be deemed to be transferable or renewable to him as long as he continues superintendent of the house, or to his successor.

6. After the passing of this Act, no new licence shall be granted to any person for a house for the reception of lunatics, and in no existing licence shall the number of patients be increased.

7. This Section does not apply to licensed houses used solely for the reception of idiots and imbeciles.

Amendments as to Licensed Houses.

(Section 57.)

1. Visitors of licensed houses shall be appointed by the justices of every county or borough under Section 17 of the Lunacy Act, 1845, whether there is a licensed house within the county or borough or not.

2. In every county or borough where such visitors have not been appointed before the commencement of this Act, the justices shall appoint such visitors at the Quarter and Special Sessions respectively next after the commencement of this Act.

3. A medical visitor shall be entitled to such remuneration as the justices may approve, to be provided in the manner in which the remuneration of a visitor for services under the Lunacy Act, 1845, is provided.

4. Where there is no licensed house in a county or borough, such remuneration and other expenses shall be provided in the manner provided by the Lunacy Act, 1845.

5. The clerk to the visitors of licensed houses shall call a meeting of the visitors at such time and place as two such visitors may direct.

6. In the case of a joint licence, if any of the licensees die and one of the survivors has undertaken within ten days of the death or gives to the Commissioners or justices a written undertaking to reside on the premises, the licence shall remain in force.

7. Where a licence has been transferred by the justices of a county

or borough under Section 39 of the Lunacy Act, 1845, the clerk of the peace of the county or borough shall within three days after the date of the instrument of transfer send a copy thereof to the Commissioners.

8. A clerk of the peace who makes default under this Section shall for each day during which the default continues be liable to a penalty not exceeding 40s.

Provisions for the Registration of Hospitals in which Lunatics are Received.

(Section 58.)

1. When application is made after the passing of this Act for the registration of a hospital for the reception of lunatics, the Commissioners may depute one or more of their members, or employ such person or persons as they think fit to inspect the hospital and report thereon.

2. If the Commissioners are of the opinion the hospital ought not to be registered, they are to report to the Secretary of State, giving their reasons. The Secretary of State's decision shall be final.

3. If the Commissioners are of the opinion the hospital ought to be registered they shall issue a *provisional* certificate of registration.

4. The provisional certificate shall be valid for six months from the date of its issue unless superseded by a *complete* certificate.

5. Within three months from the date of the provisional certificate the managing committee of the hospital shall frame regulations and submit them to a Secretary of State for approval.

6. If the regulations are approved the Commissioners shall issue a complete certificate specifying the number of patients of each sex.

7. Lunatics may be received in the hospital under a provisional certificate, but if no complete certificate is granted no lunatic shall be received or detained after the expiration of the provisional certificate.

8. No lunatic shall be received in any hospital unless it has been registered before or (provisionally or completely) after the passing of this Act.

9. Any superintendent receiving or detaining a lunatic in a hospital contrary to the provisions of this Act shall be guilty of a misdemeanour.

(Section 59.)

1 and 2. No building except it is shown on the plans sent to the Commissioners shall be deemed part of the hospital for the reception of lunatics; if the superintendent of the hospital knowingly permits the infringement of this he shall be guilty of a misdemeanour.

(Section 60.)

1 and 2. The accounts of every registered hospital which does not submit its accounts to the Charity Commissioners shall be audited

once a year by an accountant, and printed. The Commissioners may prescribe the form in which the accounts shall be kept.

(Section 61.)

The committee of any hospital may grant to any officer or servant who is incapacitated by confirmed illness, age, or infirmity, who has been 15 years in the service of the hospital, and who is not less than 50 years of age, such superannuation allowance not exceeding two-thirds of the salary and allowances enjoyed by him as the committee may think fit.

(Section 62.)

The following persons are disqualified from being members of the governing body of a registered hospital:—

(*a*) Any medical or other officer.

(*b*) Anyone interested or participating in the profits of any work done for the managing committee, except he be a member of an incorporated company which has entered into a contract.

(Section 63.)

1. The Commissioners may require any officer of a registered hospital to give them such information as they think fit as regards the manner in which the regulations of the hospital are carried out.

2. If they are of opinion the regulations are not properly carried out they may give the superintendent and any two members of the committee notice, stating particulars, and requiring them to be carried out as they may think proper.

3. If they are not so carried out in six months the Commissioners may, with the sanction of the Secretary of State, *close the hospital.*

4. If any lunatics are kept therein after the date appointed for closing the hospital the superintendent shall be guilty of a misdemeanour.

5. Before an order is made under this section the Commissioners shall give the superintendent and any two members of the committee notice, requiring them to state within fourteen days why their requirements have not been complied with. Such statement shall be laid before the Secretary of State.

(Section 64.)

As from the passing of this Act no agreement shall be made between a local authority and the subscribers to a hospital, for uniting to maintain an asylum or for the purpose of receiving pauper lunatics into the hospital. Should such an agreement already exist, it may be renewed with the consent of a Secretary of State.

Power to retain Land unsuitable or not required for Asylum purposes.

(Section 68.)

Any lands or buildings which may have been used for the purposes of a county or borough asylum, and found unsuitable or are not required, may, with the consent of a Secretary of State, be retained by the local authority.

Rating of Lunatic Asylums.

(Section 69.)

All lands and buildings already or hereafter purchased or acquired for the purposes of a lunatic asylum shall, while used for such purpose, be assessed to county, parochial, district and other rates as other lands and buildings in the same township, parish, or district.

Provision for the Transfer of an Officer to another Asylum.

(Section 70.)

When an officer is transferred from one asylum to another, wholly or in part belonging to the same authority, his service in all such asylums shall be counted, for the purpose of computing his pension, as if all such asylums had constituted only one asylum.

Contracts for Reception of Borough Lunatics into an Asylum.

(Section 71.)

Where a contract has been entered into before the passing of this Act, or shall be entered into hereafter, on behalf of a borough and the committee of visitors of an asylum for the reception of pauper lunatics the contract shall not after the passing of this Act be determined without the sanction of a Secretary of State.

Conveyance of Land to Municipal Corporations.

(Section 72.)

Where the local authority is the council of a borough any lands or hereditaments used or acquired on behalf of the local authority for the purposes of the Lunacy Acts may be conveyed to the municipal corporation of the borough, to be held by them in trust for the purposes aforesaid.

Provisions for the Resignation and Reports of Commissioners and the Salary and Qualification of Secretary.

(Section 73.)

1. A legal or medical Commissioner upon resigning his office may be appointed a Commissioner, and upon the request of any four Com-

missioners may perform any duty which he might have performed before his resignation.

2. In case of temporary illness of a medical or legal Commissioner, the Lord Chancellor may, on the recommendation of the Commissioners, appoint a qualified person to act for him.

(Section 74.)

1. The Commissioners shall report every six months to the Lord Chancellor the number of visits they have made and the number of patients they have seen.

2. In or before the month of June of every year they shall make a report to the Lord Chancellor, made up to the end of the preceding year, upon the conditions of the asylums, &c., and other places visited by them, and the care of the patients and other particulars they think deserving notice.

3. They shall lay copies of the reports under this Section before Parliament, if sitting, within a month after they have been made, or, if not sitting, within 21 days after the commencement of the next session.

(Section 75.)

The salary of the secretary to the Commissioners shall be determined by the Treasury, with the concurrence of the Lord Chancellor. The secretary shall be a barrister-at-law, of at least seven years' standing, and shall be deemed a permanent civil servant of the State.

Provisions as to Ministers of any Religion being Appointed to every Asylum.

(Section 77.)

The committee of every asylum may appoint a minister of any religious persuasion to attend patients of the same religion as himself, and allow him such remuneration as they think fit.

Provisions for retaking Lunatics escaping to or from England, Ireland, or Scotland.

(Section 78.)

1. In the case of a lunatic lawfully detained in England escaping into Scotland or Ireland, notice must be given at once to the Commissioners, who, by writing, may authorize application to be made, by such person as they think fit, to any justice having jurisdiction in the place where the lunatic was detained for a warrant authorizing such person to bring the lunatic back to such place.

2. Such warrant shall in England, Scotland, or Ireland be sufficient evidence that the lunatic was lawfully detained, and shall be sufficient authority for any sheriff or sheriff substitute in Scotland, or any Justice of the Peace in Ireland, to countersign it, and being so counter-

signed may be executed in Scotland or Ireland by retaking such lunatic and restoring him to the custody from which he escaped.

(Sections 79 and 80.)

In the case of a lunatic escaping from Scotland to England or Ireland, or from Ireland to England or Scotland, the method of procedure is the same, *mutatis mutandis;* notice of the escape being sent in the first place to the General Board of the Commissioners in Lunacy for Scotland, or to the Inspectors of Lunatics in Ireland.

(Section 81.)

The warrant issued shall not authorize the retaking of the lunatic after the expiration of the time allowed by the law in the place where he was detained.

Abuse of Female Lunatics.

(Section 82.)

If any superintendent, &c., or any other person employed in any asylum, &c., or workhouse, or any attendant having charge of a single patient shall carnally know or attempt to have carnal knowledge of any female under care or treatment as a lunatic in the asylum, &c., or workhouse, he shall be guilty of a misdemeanour, and being convicted shall be liable to two years' imprisonment without hard labour; consent, or alleged consent, shall be no defence to an indictment or prosecution.

Male Person not to be employed in Personal Custody of Female Patient.

(Section 83.)

It shall not be lawful to employ any male person in any asylum, &c., in the personal custody or restraint of any female patient. Any person so employing a male person shall be liable to a penalty of £20. The superintendent or proprietor may on occasions of urgency do so if necessary, reporting the employment of such person to the Commissioners or Visitors at their next visit.

Prosecutions, Defaults, and Misdemeanours.

(Section 84.)

The power given by section 56, chapter 100, of 8 and 9 Victoria, to a Secretary of State to direct the Attorney General to prosecute on the part of the Crown in certain cases, after the commencement of this Act shall be extended to all misdemeanours under this or any other Lunacy Act.

(Section 85.)

1. Any person making default in sending to the Commissioners any report or other document required under this or any other Lunacy Act shall for each day be liable to a penalty not exceeding £10; but the penalties may be remitted if the court is satisfied that the default arose from mere accident or oversight.

2. Any person obstructing a Commissioner or Visitor in the exercise of his powers shall be liable to a penalty not exceeding £50, and also be guilty of a misdemeanour.

3. Any person guilty of any act or omission which under Section 90 of the Lunacy Act, 1845, is punishable as a misdemeanour shall also for every such act or omission be liable to a penalty not exceeding £50.

4. The provisions of the Lunacy Act, 1845, and the Lunatic Asylums Act, 1853, as to proceedings for offences and recovery of penalties shall apply under this Act.

(Section 86.)

1. The burden of proof as to the transmitting documents shall lie with the person proceeded against under the Lunacy Acts or this Act. The testimony of one witness upon oath that such documents have been posted or left as required by the Act shall be a bar to all further proceedings.

2. In proceedings under the Lunacy Act or this Act with regard to the question of a house being licensed or a hospital registered the license or certificate of registration shall be produced or sufficient evidence given to prove that a license or certificate is in force.

Power to Amalgamate the Lunacy Departments.

1. The Lord Chancellor may at any time after the commencement of this Act amalgamate the office of the Masters in Lunacy and their staff, and the office of the Lord Chancellor's Visitors of Lunatics and their staff, and may amalgamate such offices, or either of them, with the office of Commissioners in Lunacy, and may give such directions as he may think fit for the reconstitution of the Commissioners in Lunacy, and for the exercise and performance of the powers and duties of the Commissioners and of the officers and staff amalgamated respectively.

2. In the event of such amalgamation the Lord Chancellor may, with the concurrence of the Treasury, fix the qualifications and salaries of the members of the amalgamated office and staff, and may from time to time increase and diminish the number of such members and staff.

3. Such order shall not prejudice the rights of the masters, visitors, and commissioners holding office at the passing of this Act.

4. The Lord Chancellor may order the expenses of amalgamation

and providing office accommodation to be paid under the Lunacy Regulation Act, 1853.

Power of the Lord Chancellor and Commissioners to make Rules.

(Section 88.)

1. It shall be lawful for the Commissioners, with the approval of the Lord Chancellor, by rules to prescribe the books to be kept in asylums, etc., and houses for single patients, the entries to be made therein, and the reports and other documents to be sent to the Commissioners or other persons, and the times and manner in which such entries, reports and other documents are to be made and sent, or to substitute forms for those now in use.

2. Subject to the preceding Sub-Section, the Lord Chancellor may make rules for carrying this or any other Lunacy Act into effect and for regulating costs and fees subject to the concurrence of the Treasury.

3. The Lord Chancellor may by rule direct in what manner any application in lunacy is to be made.

4. The Lord Chancellor and the Secretary of State may by rule provide for the prevention of interference or delay in the exercise of the jurisdiction of county court judges and magistrates.

5. Subject to any rules under this Section the existing rules shall continue in force.

6. Any rules and orders under any Lunacy Act made under this Section may be varied or rescinded.

7. All rules under this Section shall within three weeks be laid before Parliament, if sitting, or within three weeks of the commencement of the next Session, and shall be judicially noticed, and have effect as if enacted by this Act.

8. A rule under this Section shall not come into operation until the expiration of a month after it is made and issued.

9. This Section shall come into operation immediately on the passing of this Act.

Relating to Forms.

(Section 89.)

Subject to rules under this Act the forms in the first schedule of this Act shall be used whenever applicable with such modifications as circumstances may require, and shall be deemed sufficient.

Saving as to Criminal Lunatics.

(Section 90.)

Except as by this Act otherwise expressly provided, nothing in this Act contained shall affect the provisions of the Criminal Lunatics Act, 1884, or of any Act relating to criminal lunatics.

Definitions.

(Section 91.)

In this Act, unless the context otherwise requires :

"Union" includes a parish under a separate board of guardians elected either under a local Act or under the Poor Law Amendment Act, 1834.

"Medical practitioner" means a medical practitioner duly registered under the Medical Act, 1858, and the Acts amending the same, and the Medical Act, 1886.

"Commissioners" means Commissioners in Lunacy.

"Treasury" means the Lords Commissioners of Her Majesty's Treasury, or any two of them.

"The Judge in Lunacy" means the Lord Chancellor or any Judge of the Supreme Court of Judicature entrusted for the time being with the care and commitment of the custody of the persons and estates of idiots, lunatics, and persons of unsound mind.

"Relative" means a lineal ancestor or lineal descendant, or a lineal descendant of an ancestor not more remote than great grandfather or great grandmother.

"Reception order" means an order for the reception of a lunatic in an asylum, hospital, or licensed house, or as a single patient, and includes an urgency order.

"Local authority" means the council of an administrative county, county borough, and borough, including the City of London, in whom, under the Lunacy Acts, as amended by the Local Government Act, 1888, the powers in relation to the provision, enlargement, maintenance, management, and visitation of, and other dealing with asylums for pauper lunatics are vested; and a local authority, not being a county council, shall have the same powers in relation to those purposes as a county council.

"The Lunacy Acts" means the Acts mentioned in the Second Schedule.

"Magistrate" means a stipendiary magistrate and any magistrate appointed to act at any of the police courts of the Metropolis.

"Public department" means the Treasury, the Commissioners for executing the office of Lord High Admiral, and any of Her Majesty's Principal Secretaries of State, and any other public department of the Government.

Construction of Act.

(Section 92.)

This Act shall be construed as one with the Lunacy Acts, and expressions used in this Act shall according to the subject matter in each case have the same meaning as in those Acts respectively, save as in this Act otherwise provided.

Short Titles of Acts.

(Section 93.)

The Acts mentioned in the first column of the Second Schedule may be cited by the short titles in the second column of that schedule.

Repeal.

(Section 94.)

The Acts mentioned in the Third Schedule to this Act are hereby repealed to the extent in the third column of that schedule specified without prejudice to anything done or suffered thereunder.

THE FIRST SCHEDULE.

FORM 1.—*Petition for an Order for reception of a Private Patient.*

In the matter of *A.B.* a person alleged to be of unsound mind.

To His Honour the judge of the county court of [*or* To stipendiary magistrate for *or* To a justice of the peace for .]

The petition of *C.D.* of [1] in the county of .

1. I am [2] years of age.

2. I desire to obtain an order for the reception of *A.B.* as a lunatic [3] in the asylum [*or* hospital *or* house *as the case may be*] of situate at [4] .

3. I last saw the said *A.B.* at on the [5] day of

4. I am the [6] of the said *A.B.* [*or if the Petitioner is not connected with or related to the patient state as follows:*]

I am not related to or connected with the said *A.B.* The reasons why this petition is not presented by a relation or connection are as follows: [*State them.*]

The circumstances under which this petition is presented by me are as follows: [*State them.*]

5. I am not related to or connected with either of the persons signing the certificates which accompany this petition as *(where the petitioner is a man)* husband, father, father-in-law, son, son-in-law, brother, brother-in-law, partner or assistant *(or where the petitioner is a woman)*, wife, mother, mother-in-law, daughter, daughter-in-law, sister, sister-in-law, partner or assistant.

6. I undertake to visit the said *A.B.* personally or by someone specially appointed by me at least once in every six months while under care and treatment under the order to be made on this petition.

7. A statement of particulars relating to the said *A.B.* accompanies this petition.

If it is the fact add:

8. The said *A.B.* has been received in the asylum [*or* hospital *or* house *as the case may be*] under an urgency order dated the

The petitioner therefore prays that an order may be made in accordance with the foregoing statement.

[Signed]

Dated full Christian and surname.

[1] Full postal address and rank, profession, or occupation. [2] At least twenty-one. [3] Or an idiot or person of unsound mind. [4] Insert a full description of the name and locality of the asylum, hospital, or licensed house, or the full name, address, and description or the person who is to take charge of the patient as a single patient. [5] Some day within 14 days before the date of the presentation of the petition. [6] Here state the connection or relationship with the patient.

FORM 2.—*Statement of Particulars.*

STATEMENT of particulars referred to in the annexed petition [or in the above or annexed order].

The following is a statement of particulars relating to the said *A.B.* [1]:—

Name of patient, with Christian name at length.

Sex and age.

†Married, single, or widowed.

†Rank, profession, or previous occupation (if any).

†Religious persuasion.

Residence at or immediately previous to the date hereof.

†Whether first attack.

Age on first attack.

When and where previously under care and treatment as a lunatic, idiot, or person of unsound mind.

†Duration of existing attack.

Supposed cause.

Whether subject to epilepsy.

Whether suicidal.
Whether dangerous to others, and in what way.
Whether any near relative has been afflicted with insanity.
Names, Christian names, and full postal addresses of one or more relatives of the patient.
Name of the person to whom notice of death to be sent, and full postal address if not already given.
Name and full postal address of the usual medical attendant of the patient.

(Signed)

When the petitioner or person signing an urgency order is not the person who signs the statement, add the following particulars concerning the person who signs the statement. { Name with Christian name at length. Rank, profession, or occupation (if any). How related to or otherwise connected with the patient.

[1] If any particulars are not known, the fact is to be so stated.

[†]. Where the patient is in the petition or order described as an idiot omit the particulars marked.

FORM 3.—*Order for reception of a private patient to be made by a Judge of County Courts, Stipendiary Magistrate, or Justice appointed under the Lunacy Acts Amendment Act, 1889.*

I, the undersigned *E.F.*, being the Judge of the County Court of [*or* the Stipendiary Magistrate for , or a Justice for specially appointed under the Lunacy Acts Amendment Act, 1889], upon the petition of *C.D.*, of [1] in the matter of *A.B.*, a lunatic [2], accompanied by the medical certificates of *G.H.* and *I J.* hereto annexed, and upon the undertaking of the said *C.D.* to visit the said *A.B.* personally or by someone specially appointed by the said *C.D.* once at least in every six months while under care and treatment under this order, hereby authorize you to receive the said *A.B.* as a patient into your asylum [3]. And I declare that I have [*or* have not] personally seen the said *A.B.* before making this order.

Dated

(Signed) *E.F.*,
The Judge of the County Court of
[*or* a Stipendiary Magistrate, *or* a Justice for appointed under the above-mentioned Act.]

To [4]

[1] Address and description. [2] Or an idiot or person of unsound mind. [3] Or hospital or house or as a single patient. [4] To be addressed to the medical superintendent of the asylum or hospital, or to the proprietor or superintendent of the house in which the patient is to be placed.

FORM 4.—*Form of urgency Order for the reception of a private patient.*

I, the undersigned, being a person twenty-one years of age, hereby authorize you to receive as a patient into your house [1] *A B*, as a lunatic [2], whom I last saw at on the [3] day of 18 . I am not related to or connected with the person signing the certificate which accompanies this order in any of the ways mentioned in the margin [4]. Subjoined [or annexed] hereto [5] is a statement of particulars relating to the said *A.B.*

(Signed) Name and Christian name at length
Rank, profession, or occupation (if any)
Full postal address
How related to or connected with the patient.

[If not the husband or wife or a relative of the patient, the person signing to state as briefly as possible: 1. Why the order is not signed by the husband or wife or a relative of the patient. 2. His or her connection with the patient, and the circumstances under which he or she signs.]

Dated this day of 18 .

To proprietor or superintendent of house [6] [*or* hospital *or* asylum].

[1] Or hospital or asylum or as a single patient. [2] Or an idiot or a person of unsound mind. [3] Some day within two days before the date of the order. [4] Husband, wife, father, father-in-law, mother, mother-in-law, son, son-in-law, daughter, daughter-in-law, brother, brother-in-law, sister, sister-in-law, partner or assistant. [5] *See* Form 2. [6] Describing house or hospital or asylum by situation and name.

FORM 5.—*Certificate as to Personal Interview after Reception.*

I certify that it would be prejudicial to *A.B.* to be taken before or visited by a judge of county courts, magistrate, or justice.

(Signed) *C.D.*,
Medical Superintendent of the Asylum *or* Hospital *or* Medical Proprietor *or*
Attendant of the *or* Medical Attendant of the said *A.B.*

FORM 6.—*Notice of Right to Personal Interview.*

Take notice that you have the right, if you desire it, to be taken before or visited by a judge of county courts, magistrate, or justice. If you desire to exercise such right, you must give me notice thereof by signing the enclosed form on or before the day of

Dated

(Signed) *C.D.*,
Superintendent of the Asylum *or* Hospital
or Proprietor of [*or as the case may be*].

FORM 7.—*Notice of Desire to have a Personal Interview.*

[*Address*] Dated

I desire to be taken before or visited by a judge, magistrate, or justice having jurisdiction in the district within which I am detained. Signed

FORM 8.—*Certificate of Medical Practitioner.*

In the matter of *A.B.* of [1] in the county [2] of [3], an alleged lunatic.

I, the undersigned *C.D.*, do hereby certify as follows :

1. I am a person registered under the Medical Act, 1858, and I am in the actual practice of the medical profession.

2. On the day of 18 , at [4] in the county [5] of [separately from any other practitioner] [6], I personally examined the said *A.B.* and came to the conclusion that he is a [lunatic, an idiot, or a person of unsound mind] and a proper person to be taken charge of and detained under care and treatment.

3. I formed this conclusion on the following grounds, viz. :—

(*a.*) Facts indicating insanity observed by myself at the time of examination [7], viz. :—

(*b.*) Facts communicated by others, viz. :—[8]

[*If an urgency certificate is required it must be added here. See* Form 9.]

If the lunatic is to be received as a single patient in a house belonging to or kept by a medical practitioner under the order of a county court judge, magistrate, or justice, add the following paragraph :—

4. I certify that the said *A.B.* is suffering from unsoundness of mind of a temporary character [*or* from decay of mind in old age, *or* is desirous of voluntarily submitting to care and treatment, *as the case may be*].

5. The said *A.B.* appeared to me to be [*or* not to be] in a fit condition of bodily health to be removed to an asylum, hospital, or licensed house.[9]

6. I give this certificate having first read the section of the Act of Parliament printed below.

Dated (Signed) *C.D.*, of [10]

Extract from Section 23 *of the Lunacy Acts Amendment Act*, 1889.

Any person who makes a wilful misstatement of any material fact in any medical or other certificate or in any statement or report of bodily or mental condition under the Lunacy Acts, or under this Act, shall be guilty of a misdemeanour.

[1] Insert residence of patient. [2] City or borough, as the case may be. [3] Insert profession or occupation, if any. [4] Insert the place of examination, giving the name of the street, with number or name of house, or should there be no number, the Christian and surname of occupier. [5] City or borough, as the case may be. [6] Omit this where only one certificate is required. [7] If the same or other facts were observed previous to the time of the examination, the certifier is at liberty to subjoin them in a separate paragraph. [8] The names and Christian names (if known) of informants to be given, with their addresses and descriptions. [9] Strike out this clause in case of a private patient whose removal is not proposed. [10] Insert full postal address.

FORM 9.—*Statement accompanying Urgency Order.*

I certify that it is expedient for the welfare of the said *A.B.* [*or* for the public safety, *as the case may be*] that the said *A.B.* should be forthwith placed under care and treatment.

My reasons for this conclusion are as follows : [*State them.*]

FORM 10.—*Certificate as to Pauper Lunatic in a Workhouse.*

I, the undersigned Medical Officer of Workhouse of the Union, hereby certify that I have carefully examined into the state of health and mental condition of *A.B.*, a pauper in the said workhouse, and that he is in my opinion a lunatic, and a proper person to be allowed to remain in the workhouse as a lunatic, and that the accommodation in the workhouse is sufficient for his proper care and treatment separate from the inmates of the workhouse not lunatics [*or*, that his condition is such that it is not necessary for the convenience of the lunatic or of the other inmates that he should be kept separate].

The grounds for my opinion that the said *A.B.* is a lunatic are as follows :

Dated (Signed) Medical Officer of the Workhouse.

FORM 11.—*Order for detention of Lunatic in Workhouse.*

I, the undersigned *C.D.*, a justice of the peace for being satisfied that *A.B.*, a pauper in the workhouse of the is a lunatic [or idiot or person of unsound mind] and a proper person to be taken charge of under care and treatment in the workhouse, and being satisfied that the accommodation in the workhouse is sufficient for his proper care and treatment separate from the inmates of the workhouse not lunatics [*or*, that his condition is such that it is not necessary for the convenience of the lunatic or of the other inmates that he should be kept separate] hereby authorize you to take charge of, and, if the workhouse medical officer shall certify it to be necessary, to detain the said *A.B.* as a

patient in your workhouse. Subjoined is a statement of particulars respecting the said *A.B.*

(Signed) *C.D*,
A justice of the peace for

Dated
To the Master of the Workhouse of the

Statement of Particulars.

Name of patient and Christian name at length.
Sex and age.
Married, single, or widowed.
Condition of life and previous occupation (if any).
Religious persuasion as far as known.
Previous place of abode.
Whether first attack.
Age (if known) on first attack.
When and where previously under care and treatment.
Duration of existing attack.
Supposed cause.
Whether subject to epilepsy.
Whether suicidal.
Whether dangerous to others.
Whether any near relative has been afflicted with insanity.
Name and Christian name and address of nearest known relative of the patient and degree of relationship if known.
I certify that to the best of my knowledge the above particulars are correct.

[To be signed by the relieving officer.]

FORM 12.—*Order for reception of a Pauper Lunatic.*

I, *C.D.*, having called to my assistance *E.F.*, of , a duly qualified medical practitioner, and being satisfied that *A.B.* [*describing him*] is a pauper [in receipt of relief, *or* in such circumstances as to require relief for his proper care and maintenance], and that the said *A.B.* is a lunatic [*or* an idiot, *or* a person of unsound mind] and a proper person to be taken charge of and detained under care and treatment, hereby direct you to receive the said *A.B.* as a patient into your asylum [*or* hospital, *or* house]. Subjoined is a statement of particulars respecting the said *A.B.*

(Signed) *C.D*,
A justice of the peace for

Dated the day of one thousand eight hundred and
To the superintendent of the asylum for the county [*or* borough] of [*or* the lunatic hospital of ; *or E.F.* proprietor of the licensed house of ; describing the asylum, hospital, or house].

Note.—Where the order directs the lunatic to be received into any asylum, other than an asylum of the county or borough in which the parish or place from which the lunatic is sent is situate, or into a registered hospital or licensed house, it shall state, that the justice making the order is satisfied that there is no asylum of such county or borough, or that the asylum thereof is full; or (as the case may be) the special circumstances, by reason whereof the lunatic cannot conveniently be taken to an asylum for such first-mentioned county or borough.

Statement of Particulars.

STATEMENT of particulars referred to in the above or annexed order.
The following is a statement of particulars relating to the said *A.B.* [1]:—
Name of patient, with Christian name at length.
Sex and age.
†Married, single, or widowed.
†Rank, profession, or previous occupation (if any).
†Religious persuasion.
Residence at or immediately previous to the date hereof.
†Whether first attack.
Age on first attack.
When and where previously under care and treatment as a lunatic, idiot, or person of unsound mind.
†Duration of existing attack.
Supposed cause.
Whether subject to epilepsy.
Whether suicidal.
Whether dangerous to others, and in what way.
Whether any near relative has been afflicted with insanity.
Union to which lunatic is chargeable.
Names, Christian names, and full postal addresses of one or more relatives of the patient.
Name of the person to whom notice of death to be sent, and full postal address if not already given.

(Signed) *G.H.*
To be signed by the Relieving Officer or Overseer.

[1] If any particulars are not known, the fact is to be so stated. [Where the patient is in the order described as an idiot omit the particulars marked †].

FORM 13.—*Certificate that patient continues of unsound mind.*

I, , certify that *A.B.*, the patient [*or A.B., C.D.*, etc., the patients] to whom the annexed report relates, is [*or are*] still of unsound mind, and a proper person [*or* proper persons] to be detained under care and treatment.

(Signed)
Medical Officer of the asylum, or medical attendant of the hospital or house situate at , or medical practitioner visiting the said *A.B.*

Dated

FORM 14.—*Consent of the Commissioners in Lunacy to the admission of a boarder.*

We hereby sanction the admission of *A.B.* as a boarder into for the term of from the day of in accordance with the provisions of the statute and in terms of *A.B.'s* application.

(Signed)
Commissioners in Lunacy.

Given at the office of the Commissioners in Lunacy, London, this day of 18 .

FORM 15.—*Order for Reception of a Lunatic not under proper care and control, or cruelly treated or neglected, to be made by a Justice appointed under the Lunacy Acts Amendment Act*, 1889.

I, the undersigned *C.D.*, being a Justice for specially appointed under the Lunacy Acts Amendment Act, 1889, having caused *A.B.* to be examined by two duly qualified medical practitioners, and being satisfied that the said *A.B.* is a lunatic not under proper care and control [*or* is cruelly treated or neglected by the person having the care or charge of him,] and that he is a proper person to be taken charge of and detained under care and treatment, hereby direct you to receive the said *A.B.* as a patient into your asylum [*or* hospital *or* house]. Subjoined is a statement of particulars respecting the said *A.B.*

(Signed)
A justice of the peace for appointed under the above-mentioned Act.

Dated

To the superintendent of the asylum for , or of the lunatic hospital of , or the proprietor of the licensed house at .

Statement of Particulars.

STATEMENT of particulars referred to in the above or annexed order.

The following is a statement of particulars relating to the said *A.B.* [1] :—

Name of patient, with Christian name at length.
Sex and age.
†Married, single, or widowed.
†Rank, profession, or previous occupation (if any).
†Religious persuasion.
Residence at or immediately previous to the date hereof.
†Whether first attack.
Age on first attack.
When and where previously under care and treatment as a lunatic, idiot, or person of unsound mind.
†Duration of existing attack.
Supposed cause.
Whether subject to epilepsy.
Whether suicidal.
Whether dangerous to others, and in what way.
Whether any near relative has been afflicted with insanity.
Union to which lunatic is chargeable.
Names, Christian names, and full postal addresses of one or more relatives of the patient.
Name of the person to whom notice of death to be sent, and full postal address if not already given.

(Signed)
To be signed by the relieving officer, overseer, or other person on whose information the order is made.

[1] If any particulars are not known, the fact is to be so stated. [Where the patient is in the order described as an idiot omit the particulars marked†].

FORM 16.—*Certificate as to Mechanical Means of Restraint.*

I, the undersigned *C.D.* [the medical superintendent, *or* a medical officer of the Asylum, *or* the Hospital, *or* the medical proprietor or attendant of the House, *or* the medical officer of the Workhouse, *or* the medical attendant of *A.B.*, a lunatic under care or treatment at , *as the case may be*] certify that I have examined *A.B.*, a lunatic in the said [asylum, hospital, house, *or* workhouse, *or* the said *A.B.*, *as the case may be*], and that in my opinion mechanical means of bodily restraint were [*or* are] necessary in his case for purposes of surgical [*or* medical] treatment [*or* to prevent him from injuring himself *or* others]. The necessary means are : [*State them.*]

I found my opinion upon the following grounds : [*State them*].

(Signed)

FORM 17.—*Certificate of Disability of Person entitled to Payments from a Public Department.*

I, , being a justice of the peace for *or* the rector, *or* vicar, *or* minister [*state the denomination and residence*], hereby certify that I know the said *A.B.*, and that I believe him *or* her to be unable, by reason of mental disability, to manage his *or* her affairs; and I further certify that I believe the family of the said *A.B.* to consist of

Dated

Signed [*Name*].

[*Place of abode.*]

FORM 18.—*Medical Certificate of Disability of Person entitled to Payments from a Public Department.*

I, , being a person registered under the Medical Act, 1858, and in the actual practice of my profession, hereby certify that I have this day visited and personally examined *A.B.*, and that the said *A.B.* is unable by reason of mental disability to manage his *or* her affairs, and that I have formed this conclusion on the following grounds, viz. : [*State them.*]

Dated

Signed [*Name*].

[*Postal Address in full.*]

THE SECOND SCHEDULE.

Sections 91 and 93.

Session and Chapter.	Short Title.
8 & 9 Vict. c. 100	The Lunacy Act, 1845.
16 & 17 Vict. c. 96	The Lunacy Act, 1853.
16 & 17 Vict. c. 97	The Lunatic Asylums Act, 1853.
18 & 19 Vict. c. 105	The Lunacy Act, 1855.
19 & 20 Vict. c. 87	The Lunacy Act, 1856.
25 & 26 Vict. c. 111	The Lunacy Act, 1862.
26 & 27 Vict. c. 110	The Lunacy Act, 1863.
28 & 29 Vict. c. 80	The Lunacy Act, 1865.
48 & 49 Vict. c. 52	The Lunacy Act, 1885.

THE THIRD SCHEDULE.

Section 94.

Session and Chapter.	Short Title.	Extent of Repeal.
8 & 9 Vict. c. 100 ...	The Lunacy Act, 1845.	Sections seventy-six, seventy-seven, and eighty-eight.
16 & 17 Vict. c. 70 ...	The Lunacy Regulation Act, 1853.	Section one hundred and fifty-three.
16 & 17 Vict. c. 96 ...	The Lunacy Act, 1853.	Sections five, six, eleven, twelve, and thirty-two. Schedules A and B.
16 & 17 Vict. c. 97 ...	The Lunatic Asylums Act, 1853.	Section thirty-five. Section forty-three, the words "and such lunatic" to the end of the section. Sections sixty-seven and sixty-eight so far as they provide that a justice may in any case act upon his own knowledge only for the purpose of making an order. Section sixty-eight, so far as relates to any person, not a pauper and not wandering at large, who is deemed to be a lunatic and not under proper care and control or is cruelly treated or neglected by any relative or other person having the care or charge of him. Sections sixty-nine, seventy-six, and eighty-seven. Schedule F., Nos. 1, 2, and 3.
25 & 26 Vict. c. 111 ...	The Lunacy Act, 1862.	Sections eighteen, twenty, twenty-four, twenty-seven, and forty
39 & 40 Vict. c. 36 ...	The Customs Consolidation Act, 1876.	Section three from "Provided" to the end of the section.
50 & 51 Vict. c. 67 ...	The Superannuation Act, 1887.	Section seven, subsection one.

ERRATUM.

July Number, 1889, p. 224, line 34, for "Cornwall County Asylum" *read* "Westmoreland and Cumberland County Asylum."

Appointments.

Clark, A. Campbell, M.D., to be Lecturer on Psychological Medicine, St. Mungo's College, Glasgow.

Eames, H. M., L.R.C.P. and S.Ed., appointed Clinical Assistant to Rubery Hill Asylum.

Ensor, C. W., L.R.C.P., M.R.C.S., appointed Junior Assistant Medical Officer to the Somerset and Bath Lunatic Asylum.

Johnson, H. J., M.R.C.S., L.S.A., appointed 3rd Assistant Medical Officer to the Gloucester County Asylum.

Nicolson, R. H., M.B., C.M.Aber., appointed Senior Assistant Medical Officer to the Warwick County Asylum.

Roberts, J. H., M.B., B.Sc., B.A.Lond., appointed Resident Medical Officer to the Eastern Counties' Asylum for Idiots, Colchester.

Robertson, Alex., M.D., has been appointed Professor of Medicine in St. Mungo's College, Glasgow.

Turner, C. W., M.R.C.S., appointed Clinical Assistant to the Northumberland County Asylum.

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1880. Campbell, P. E., M.B., C.M., Senior Assist. Medical Officer, District Asylum, Caterham.
* Calmeil, M., M.D., Member of the Academy of Medicine, Paris, late Physician to the Asylum at Charenton, near Paris. (*Hon. Member.*)
1874. Cameron, John, M.D. Edin., Medical Supt., Argyll and Bute Asylum, Lochgilphead.
1881. Case, H., M.R.C.S., Med. Supt., Leavesden, Herts.
1874. Cassidy, D. M., M.D., C.M. McGill Coll., Montreal, D.Sc. (Pub. Health), Edin., F.R.C.S. Edin., Med. Superintendent, County Asylum, Lancaster.
1888. Chambers, James, M.D., M.P.C., Ass. Med. Off. Cumberland and Westmorland Asylum, Carlisle.
1887. Chapin, John B., M.D., Pennsylvania Hospital for the Insane, Philadelphia, U.S.A. (*Hon. Member.*)
1865. Chapman, Thomas Algernon, M.D. Glas., L.R.C.S. Edin., Hereford Co. and City Asylum, Hereford.
1879. Charcot, J. M., M.D., Physician to Salpêtrière, 17, Quai Malaquais, Paris, (*Hon. Member.*)
1860. Christie, Thomas B., C.I.E., M.D. St. And., F.R.S.E., F.R.C.P. Lond., F.R.C.P. Edin., Medical Superintendent, Royal India Lunatic Asylum, Ealing, W. (*Hon. General Secretary*, 1872.)
1880. Christie, J. W. Stirling, M.D., Med. Supt., County Asylum, Stafford.
1878. Clapham, Wm. Crochley S., M.D., M.R.C.P., The Grange, Rotherham.
1863. Clapton, Edward, M.D. Lond., F.R.C.P. Lond., Physician, St. Thomas's Hospital, Visitor of Lunatics for Surrey; 10A, St. Thomas Street, Borough.
1879. Clark, Archibald C., M.D. Edin., Medical Superintendent, Glasgow District Asylum, Bothwell.
1879. Clarke, Henry, L.R.C.P. Lond., H.M. Prison, Wakefield.
* 1867. Cleaton, John D., M.R.C.S. Eng., Commissioner in Lunacy, 19, Whitehall Place. (*Hon. Member.*)
1862. Clouston, T. S., M.D. Edin., F.R.C.P. Edin., F.R.S.E., Physician Superintendent, Royal Asylum, Morningside, Edinburgh. *(Editor of Journal*, 1873-1881.) (PRESIDENT 1888.)

1879. Cobbold, C. S. W., M.D., 29, Woodstock Road, Chiswick, W.
1886. Collins, G. Fletcher, M.R.C.S.E., &c.
1888. Cones, John A., M.R.C.S., Burgess Hill, Sussex.
1882. Compton, T. J., M.B., C.M. Aberd., Heigham Hall, Norwich.
1878. Cooke, Edwd. Marriott, M.B., M.R.C.S. Eng., Med. Supt. County Asylum, Worcester.
1887. Cope, George P., L.K.Q.C.P.I., M.P.C., Senior Assistant Medical Officer, Richmond District Asylum, Dublin.
1872. Courtenay, E. Mazière, A.B., M.B., C.M., T.C.D., Resident Medical Superintendent, District Asylum, Limerick, Ireland.
1884. Cox L. F., M.R.C.S., Med. Supt., County Asylum, Denbigh.
1878. Craddock F. H., B.A. Oxon, M.R.C.S. Eng., L.S.A., Med. Supt., County Asylum, Gloucester.
1888. Cumming, R., M.B., C.M. Aberd., Asst. Med. Off., Perth District Asylum.
1884. Curwen, J., M.D., Warren, Pennsylvania State Hospital for the Insane, U.S.A. (*Hon. Member.*)
1889. Dabbs, Charles John, M.R.C.S., Senior Medical Officer, Camberwell House Asylum, Camberwell.
1869. Daniel, W. C., M.D. Heidelb., M.R.C.S. Eng., Epsom, Surrey.
1868. Davidson, John H., M.D. Edinburgh, Medical Superintendent, County Asylum, Chester.
1874. Davies, Francis P., M.D. Edin., M.R.C.S. Eng., Kent County Asylum, Barming Heath, near Maidstone.
1869. Deas, Peter Maury, M.B. and M.S. Lond., Medical Superintendent, Wonford House, Exeter.
1863. Delasiauve, M., M.D., Member of the Academy of Medicine, Physician to the Bicêtre, Paris, 35, Rue des Mathurins-Saint-Jacques, Paris. (*Hon. Member.*)
1876. Denholm, James, M.D., Duns, Berwickshire.
1873. Denne, T. Vincent de, M.R.C.S. Eng., Colman Hill House, Halesowen, Worcestershire.
1872. Déspine, Prosper, M.D., Rue du Loizir, Marseilles. *(Hon. Member.)*
1876. Dickson, F. K., F.R.C.P. Edin., Wye House Lunatic Asylum, Buxton, Derbyshire.
1879. Dodds, Wm. J., M.D., D.Sc. Edin., Cape of Good Hope.
1886. Donaldson, R. Lockhart, M.B., M.P.C., District Asylum, Monaghan.
1887. Douty, J. Harrington, M.R.C.S., Berks County Asylum, Moulsford, Wallingford.
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1874. Eager, Reginald, M.D. Lond., M.R.C.S. Eng., Northwoods, near Bristol.
1873. Eager, Wilson, L.R.C.P. Lond., M.R.C.S. Eng., Med. Superintendent, County Asylum, Melton, Suffolk.
1888. Earle, Leslie, M.D. Edin., Melbourn, Royston, Herts.
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1886. East, Edward, M.R.C.S. and L.S.A., 16, Upper Berkeley Street, W.
1862. Eastwood, J. William, M.D. Edin., M.R.C.P. Lond., Dinsdale Park, Darlington.
1879. Echeverria, M. G., M.D., care of Dr. Hack Tuke, Lyndon Lodge, Hanwell (*Hon. Member.*)
1873. Elliot, G. Stanley, M.R.C.P. Ed., L.R.C.S. Ed., Medical Superintendent, Caterham, Surrey.
1861. Eustace, J., M.D. Trin. Coll., Dub., L.R.C.S.I.; Highfield, Drumcondra, Dublin.
1884. Ewart, C. Theodore, M.B. Aberd., C.M., Leavesden Asylum, near Watford, Herts.
1888. Ezard, E. H., M.B., C.M. Edin., M.P.C., Asst. Med. Officer, Royal Edinburgh Asylum.
1865. Falret, Jules, M.D., 114, Rue du Bac, Paris. (*Hon. Member.*)
1867. Finch, W. Corbin, M.R.C.S. Eng., Fisherton House, Salisbury.

1873. Finch, John E. M., M.D., Medical Superintendent, Borough Asylum, Leicester.
1889. Finch, Richard T., B.A., M.B. Cantab., Resident Medical Officer, Fisherton House Asylum, Salisbury.
1882. Finegan, A. D. O'Connell, L.K. and Q.C.P.I., Med. Supt., District Asylum, Mullingar.
1889. Finlay, Dr., County Asylum, Bridgend, Glamorgan.
1882. Finlayson, James, M.B., 351, Bath Crescent, Glasgow.
1889. Finucane, Morgan, M.R.C.S., Senior Assistant Medical Officer, Hants County Asylum, Fareham.
1888. Fitzgerald, G. C., M.B., B.C. Cantab., Cane Hill Asylum, Surrey.
1872. Fletcher, Robert Vicars, Esq., F.R.C.S.I., L.K.Q.C.P.I. and L.R.C.P. Ed., Medical Superintendent, District Asylum, Ballinasloe, Ireland.
1879. Forrest, J. G. Stracey, L.R.C.P. Lond., M.R.C.S. Eng.
1861. Fox, Charles H., M.D. St. And., M.R.C.S. Eng., Brislington House, Bristol.
1880. Fox, Bonville Bradley, M.A. Oxon., M.D., M.R.C.S., Brislington House, Bristol.
1885. Francis, Lloyd, M.A., M.D. Oxon., St. Andrew's Hospital, Northampton.
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1868. } Gairdner, W. T., M.D. Edin., Professor of Practice of Physic, 225, St. Vin-
1888. } cent St., Glasgow. (PRESIDENT, 1882.) (*Hon. Member.*)
1873. Garner, W. H., Esq., F.R.C.S.I., A.B.T.C.D., Medical Superintendent, Clonmel District Asylum.
1867. Gasquet, J. R., M.B. Lond., St. George's Retreat, Burgess Hill, and 127, Eastern Road, Brighton.
1885. Gayton, F. C., M.D., Brookwood Asylum, Surrey.
1871. Gelston, R. P., L.K. and Q.C.P.I., L.R.C.S.I., Medical Supt., District Asylum, Ennis, Ireland.
Gemmell, William, M.B., C.M. Glasg., M.P.C., Royal Infirmary, Glasgow.
1878. Glendinning, James, M.D. Glas., L.R.C.S. Edin., L.M., Med. Supt., Joint Counties Asylum, Abergavenny.
1886. Godding, Dr., Medical Superintendent, Government Hospital for Insane, Washington, U.S. (*Hon. Member.*)
1889. Goodall, Edwin, M.D., M.S. Lond., M.P.C., Guy's Hospital, London.
Gordon, W. S, M.B., District Asylum, Mullingar.
1888. Graham, T., M.D. Glasg., Medical Officer, Abbey Parochial Asylum, Paisley.
1887. Graham, W., M.B., Med. Supt, District Asylum, Armagh.
1879. Granville, J. M., M.D., Harewood Place, Hanover Square, London.
1886. Greenlees, T. Duncan, M.B., City of London Lunatic Asylum, Stone, near Dartford.
1871. Greene, Richard, F.R.C.P. Edin., Med. Superint., Berry Wood, near Northampton.
1886. Grubb, J. Strangman, L.R.C P. Ed., Silsoe Villa, Uxbridge Road, Ealing, W.
1879. Gwynn, S. T., M.D., St. Mary's House, Whitechurch, Salop.
1888. Habgood, W., M.D., L.R.C.P., Ass. Med. Off., Banstead Asylum, Surrey.
1885. Hall, Ben., M.B.Lond., Medical Superintendent, The Brook Asylum, Liverpool.
1866. Hall, Edward Thomas, M.R.C.S. Eng., Blacklands House Asylum, Chelsea.
1875. Harbinson, Alexander, M.D. Irel., M.R.C.S. Eng., Assist. Med. Officer, County Asylum, Lancaster.
1887. Harding, William, M.B., C.M. Ed., Assist. Med. Officer, County Asylum, Lancaster.
1884. Harmer, Wm. Milsted, F.R.C.P. Ed., Physician Supt., North Grove House Asylum, Hawkhurst, Kent.
1886. Harvey, Crosbie Bagenal, L.A.H., Asst. Med. Officer, District Asylum, Clonmel.
1861. Hatchell, George W., M.D. Glas., L.K. and Q.C.P. Ireland, late Inspector and Commissioner of Control of Asylums, Ireland, 25, Upper Merrion Street, Dublin. (*Hon. Member.*)
1875. Haughton, Rev. Professor S., School of Physic, Trinity Coll., Dublin, M.D., T.C.D., D.C.L. Oxon, F.R.S. (*Hon. Member.*)
1868. Hearder, George J., M.D. St. And., L.R.C.S. Edin., Medical Superintendent, Joint Counties Asylum, Carmarthen.

1885. Henley, E. W., L.R.C.P., County Asylum, Gloucester.
1877. Hetherington, Charles, M.B., Med. Supt., District Asylum, Londonderry, Ireland.
1877. Hewson, R. W., L.R.C.P. Ed., Med. Supt., Coton Hill, Stafford.
1879. Hicks, Henry, M.D., Hendon Grove House, Hendon.
1879. Higgins, Wm. H., M.B., C.M., Med. Supt., County Asylum, Leicester.
1882. Hill, Dr. H. Gardiner, Medical Superintendent, Surrey County Asylum, Tooting.
Hills, William Charles, M.D. Aber., M.R.C.S. Eng., Thorpe-St. Andrew, near Norwich.
1889. Hind, Hy. Joseph, M.R.C.S. and L.S.A., Assistant Medical Officer, The Retreat, York.
1871. Hingston, J. Tregelles, M.R.C.S. Eng., Medical Superintendent, North Riding Asylum, Clifton, York.
* Hitchcock, Charles, L.R.C.P. Edin., M.R.C.S. Eng., Fiddington House, Market Lavington, Wilts.
1881. Hitchcock, Charles Knight, M.D., Bootham Asylum, York.
* Hitchman, J., M.D. St. And., F.R.C.P. Lond., F.R.C.S. Eng., late Medical Superintendent, County Asylum, Derby; The Laurels, Fairford. (PRESIDENT, 1856.)
1889. Hobhouse, Ed., M.B. and B.S. Oxon., St. Thomas's Hospital, S.E.
1863. Howden, James C., M.D. Edin., Medical Superintendent, Montrose Royal Lunatic Asylum, Sunnyside, Montrose.
1881. Hughes, C. H., M.D., St. Louis, Missouri, United States. (*Hon. Member.*)
1857. Humphry, John, M.R.C.S. Eng., Medical Superintendent, County Asylum, Aylesbury, Bucks.
1877. Hutson, E., M.D. Ed., Medical Superintendent, Lunatic Asylum, Barbadoes.
1888. Hyslop, Theo. B., M.B., C.M. Edin., M.P.C., Asst. Med. Officer, Bethlem Royal Hospital, S.E.
1882. Hyslop, James, M.D., Pietermaritzburg Asylum, Natal, S. Africa.
1865. Iles, Daniel, M.R.C.S. Eng., Resident Medical Officer, Fairford House Retreat, Gloucestershire.
1875. Inglis, Thomas, F.R.C.P. Edin., Cornhill, Lincoln.
1871. Ireland, W. W., M.D. Edin., Preston Lodge, Prestonpans, East Lothian.
1877. Isaac, J. B., M.D. Queen's Univ., Irel., Assist. Med. Officer, Broadmoor, near Wokingham.
1866. Jackson, J. Hughlings, M.D. St. And., F.R.C.P. Lond., Physician to the Hospital for Epilepsy and Paralysis, &c.; 3, Manchester Square, London, W.
1868. Jackson, J. J., M.R.C.S. Eng., Cranbourne Hall, Grouville, Jersey.
1858. Jamieson, Robert, M.D. Edin., L.R.C.S. Edin., Medical Superintendent, Royal Asylum, Aberdeen.
1860. Jepson, Octavius, M.D. St. And., M.R.C.S. Eng., Elmfield, Newlands Park, Sydenham, S.E.
1882. Jeram, J. W., L.R.C.P., Hambledon, Cosham, Hants.
1885. Johnston, D. G., M.B., C.M. Glas., Med. Supt., Moorcroft House, Hillingdon, Middlesex.
1878. Johnstone, J. Carlyle, M.D., C.M., Medical Superintendent, Roxburgh District Asylum, Melrose.
1866. Jones, Evan, M.R.C.S. Eng., Ty-mawr, Aberdare, Glamorganshire.
1880. Jones, D. Johnson, M.D. Edin., Senior Assistant Medical Officer, Kent County Asylum, Barming Heath.
1882. Jones, R., M.D. Lond., B.S., F.R.C.S., Earlswood Asylum, Surrey.
1879. Kay, Walter S., M.D., Medical Superintendent, South Yorkshire Asylum, Wadsley, near Sheffield.
1886. Keay, John, M.B., Med. Supt., Mavisbank, Polton, Midlothian.
1885. Keegan, J. T., Indianapolis, Ind., U.S.A.
1889. Keyt, Fred., M.B., C.M. Aberd., M.P.C., Clinical Assistant, West Riding Asylum, Yorks.
1886. Koch, Vincent, M.B., C.M., Royston, Barnsley, Yorkshire.
1880. Kornfeld, Dr. Herman, Grottkau, Silesia, Germany. (*Corresponding Member.*)
1889. Kowalewsky, Professor Paul, Kharkoff, Russia. (*Corresponding Member.*)
1881. Krafft-Ebing, R. v., M.D., Vienna. (*Hon. Member.*)

1866. Laehr, H., M.D., Schweizer Hof, bei Berlin, Editor of the "Zeitschrift für Psychiatrie." (*Hon. Member.*)
1870. Lawrence, A., M.D., County Asylum, Chester.
1883. Layton, Henry A., L.R.C.P. Edin., Cornwall County Asylum, Bodmin.
1883. Legge, R. J., M.D., Assist. Med. Officer, County Asylum, Derby.
1865. Leidesdorf, M., M.D., Universität, Vienna. (*Hon. Member.*)
1887. Lentz, Dr., Asile d'Aliénés, Tournai, Belgique. (*Hon. Member.*)
1858. Lewis, Henry, M.D. Bruss., M.R.C.S. Eng., L.S.A., late Assistant Medical Officer, County Asylum, Chester; West Terrace, Folkestone, Kent.
1879. Lewis, W. Bevan, L.R.C.P. Lond., Med. Supt., West Riding Asylum, Wakefield.
1863. Ley, H. Rooke, M.R.C.S. Eng., Medical Superintendent, County Asylum, Prestwich, near Manchester.
1888. Lichfield, J. W., L.R.C.P. Lond., Assist. Med. Off., Hants County Asylum, Fareham.
1888. Liddell, J., M.A., M.B., C.M. Edin., Assist. Med. Officer, James Murray's Royal Asylum, Perth.
1859. Lindsay, James Murray, M.D. St. And., F.R.C.S. and F.R.C.P. Edin., Med. Supt., County Asylum, Mickleover, Derby.
1883. Lisle, S. Ernest de, L.K.Q.C.P., Three Counties Asylums, Stotfold, Baldock.
1888. Little, W. Maxwell, M.D. Edin., Assist. Med. Off., County Asylum, Thorpe, Norwich.
1888. Lofthouse, Arthur, M.R.C.S., etc., Assist. Med. Off., County Asylum, Nottingham.
1878. Lush, Wm. John Henry, F.R.C.P. Edin., L.M., M.R.C.S. Eng., F.L.S., Fyfield House, Andover, Hants.
1872. Lyle, Thos., M.D. Glas., Rubery Hill Asylum, near Bromsgrove, Worcestershire.
1880. MacBryan, Henry C., County Asylum, Hanwell, W.
1884. Macdonald, P. W., M.D., C.M., Med. Supt., County Asylum, near Dorchester, Dorset.
1883. Macfarlane, W. H., New Norfolk Asylum, Tasmania.
1884. Mackew, S., M.B. Edin., Hertford British Hospital, Rue de Villiers, Levallois-Perret, Seine.
1886. Mackenzie, J. Cumming, M.B., C.M., M.P.C., County Asylum, Morpeth.
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1886. Maclean, Allan, L.R.C.S. Ed., Harpenden Hall, Herts.
1873. Macleod, M. D., M.B., Med. Superintendent, East Riding Asylum, Beverley, Yorks.
1882. Macphail, Dr. S. Rutherford, Derby Borough Asylum, Rowditch, Derby.
1872. Major, Herbert, M.D., 154, Manningham Lane, Bradford, Yorks, *vid* Wakefield.
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1871. } Manning, Frederick Norton, M.D. St. And., M.R.C.S. Eng., Inspector of
1884. } Asylums for New South Wales, Sydney. (*Hon. Member.*)
1865. Manning, Harry, B.A. London, M.R.C.S., Laverstock House, Salisbury.
1888. Manson, Magnus O., B.A., L.R.C.P., etc., County Asylum, Haywards Heath, Sussex.
1871. Marsh, J. Wilford, M.R.C.S. Eng., L.S.A., Medical Superintendent, County Asylum, Lincoln.
* Marshall, William G., F.R.C.S., Medical Superintendent, County Asylum, Colney Hatch, Middlesex.
1858. Maudsley, Henry, M.D. Lond., F.R.C.P. Lond., formerly Medical Superintendent, Royal Lunatic Hospital, Cheadle; 9, Hanover Square, London, W. (*Editor of Journal*, 1862-78.) (PRESIDENT, 1871.)
1886. Maye, John, M.R.C.S. and L.S.A., Ass. Med. Off., Burntwood Asylum, Lichfield.
1888. McAlister, William, M.B., C.M., Struan Villas, Kilmarnock.
1886. McCreery, James Vernon, L.R.C.S.I., Medical Superintendent, New Lunatic Asylum, Melbourne, Australia.
1873. McDonnell, Robert, M.D., T.C.D., F.R.C.S.I., M.R.I.A., 89, Merrion Square, Dublin.

1875. McDowall, T. W., M.D. Edin., L.R.C.S.E., Medical Superintendent, Northumberland County Asylum, Morpeth.
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1882. McNaughtan, John, M.D., Med. Supt., Criminal Lunatic Asylum, Perth.
1886. Macpherson, John, M.B., M.P.C., Medical Superintendent, Stirling Asylum, Larbert.
1877. Merson, John, M.D. Aberd., Medical Superintendent, Borough Asylum, Hull.
1871. Merrick, A. S., M.D. Qu. Uni. Irel., L.R.C.S. Edin., Medical Superintendent, District Asylum, Belfast, Ireland.
1867. Meyer, Ludwig, M.D., University of Göttingen. (*Hon. Member.*)
1871. Mickle, Wm. Julius, M.D., F.R.C.P. Lond., Med. Superintendent, Grove Hall Asylum, Bow, London.
1867. Mickley, George, M.A., M.B. Cantab., Medical Superintendent, St. Luke's Hospital, Old Street, London, E.C.
1881. Mierzejewski, Prof. J., Medico-Chirurgical Academy, St. Petersburg. *(Hon. Member.)*
1883. Miles, Geo. E., M.R.C.S., Callan Asylum, Sydney, N.S.W.
1887. Miller, Alfred, M.B. and B.C.Dub., Medical Superintendent, Hatton Asylum, Warwick.
1866. } Mitchell, Sir Arthur, M.D. Aberd., LL.D., K.C.B., Commissioner in Lunacy
1871. } for Scotland; 34, Drummond Place, Edinburgh. *(Hon. Member.)*
1881. Mitchell, R. B., M.D., Med. Supt., Midlothian District Asylum.
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1878. Moody, James M., M.R.C.S. Eng., L.R.C.P. and L.M. Edin., Med. Supt., County Asylum, Cane Hill, Surrey.
1885. Moore, E. E., M.B. Dub., M.P.C., Assist. Med. Officer, District Lunatic Asylum, Downpatrick, Ireland.
1882. Moore, W. D., M.D., Alresford, Hants.
* Monro, Henry, M.D. Oxon, F.R.C.P. Lond., late Visiting Physician, St. Luke's Hospital; 14, Upper Wimpole Street, London, W. (PRESIDENT, 1864.)
1886. Morel, M. Jules, M.D., Hospice Guislain, Ghent. (*Corresponding Member.*)
1884. Mortimer, J. D., M.P.C., Assist. Med. Off., Milton Asylum, Portsmouth.
1880. Motet, M., 161, Rue de Charonne, Paris. (*Hon. Member.*)
1862. Mould, George W., M.R.C.S. Eng., Medical Superintendent, Royal Lunatic Hospital, Cheadle, Manchester. (PRESIDENT, 1880.)
1889. Moynan, Wm. Arthur, M.D. and M.Ch.I., Resident Med. Officer, Wyke House, Isleworth, London.
1878. Muirhead, Claud, M.D., F.R.C.P. Edin., 30, Charlotte Square, Edinburgh.
1867. Mundy, Baron Jaromir, M.D. Würzburg, Professor of Military Hygiene, Universität, Vienna. *(Hon. Member.)*
1878. Murray, Henry G., L.K.Q.C.P. Irel., L.M., L.R.C.S.I., Assist. Med. Off., Prestwich Asylum, Manchester.
1886. Myddelton-Gavey, E. H., M.R.C.S. and L.S.A., 64, St. Matthew's Street, Ipswich.
1886. Myles, William Zachary, L.F.P.S., Med. Supt., District Asylum, Kilkenny.
1859. Needham, Frederick, M.D. St. And., M.R.C.P. Edin., M.R.C.S. Eng., late Medical Superintendent, Hospital for the Insane, Bootham, York; Barnwood House, Gloucester. (PRESIDENT, 1887.)
1880. Neil, James, M.D., M.P.C., Asst. Med. Officer, Warneford Asylum, Oxford.
1875. Newington, Alexander, M.B. Camb., M.R.C.S. Eng., Woodlands, Ticehurst.
1873. Newington, H. Hayes, M.R.C.P. Edin., M.R.C.S., Ticehurst, Sussex.
1881. Newth, A. H., M.D., Haywards Heath, Sussex.
1885. Nichols, C. H., M.D., Bloomingdale Asylum, New York. (*Hon. Member*).
1873. Nicholson, William Norris, Esq., Lord Chancellor's Visitor of Lunatics, New Law Courts, Strand, W.C. (*Hon. Member.*)
1879. Nicholson, W. R., M.R.C.S., Assistant Medical Officer, North Riding Asylum, Clifton, York.
1869. Nicolson, David, M.D. and C.M. Aber., late Med. Off., H.M. Convict Prison, Portsmouth. Med. Supt., State Asylum, Broadmoor, Wokingham, Berks.

1887. Nielsen, Fred Wm., M.A. Cantab., M.R.C.S., &c., Assistant Medical Officer, Royal Albert Asylum, Lancaster.
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1888. Nolan, Michael J., L.K.Q.C.P.I., M.P.C., Ass. Med. Off., Richmond Asylum, Dublin.
1869. North, S. W., M.R.C.S.E., F.G.S., 84, Micklegate, York, Visiting Medical Officer, The Retreat, York.
1880. Norman, Conolly, F.R.C.S.I., Med. Supt., Richmond District Asylum, Dublin, Ireland. (*Hon. Secretary for Ireland.*)
Nugent, John, M.B. Trin. Col., Dub., L.R.C.S. Ireland, Senior Inspector and Commissioner of Control of Asylums, Ireland; 14, Rutland Square, Dublin. (*Hon. Member.*)
1885. Oakshott, J. A., M.D., Assist. Med. Officer, District Asylum, Cork.
1881. O'Meara, T. P., M.B., Med. Supt., District Asylum, Carlow, Ireland.
1886. O'Neill, E. D., L.K.Q.C.P., Med. Supt., District Asylum, Castlebar.
1868. Orange, William, M.D. Heidelberg, F.R.C.P. Lond., C.B., 35, Cromwell Road, Brighton. (PRESIDENT, 1883.)
1887. O'Shaughnessy, Thomas H., M.D., Ass. Med. Off., Ballinasloe District Asylum, Ireland.
1882. Owen, R. F., 41, Park Crescent, Southport.
* Palmer, Edward, M.D. St. And., M.R.C.P. Lond., M.R.C.S., 87, Harcourt Terrace, London, S.W.
1886. Parant, M. Victor, M.D., Toulouse. (*Corresponding Member.*)
1872. Patton, Alex., M.B., Resident Medical Superintendent, Farnham House, Finglas, Co. Dublin.
* Paul, John Hayball, M.D. St. And., M.R.C.P. Lond., F.R.C.P. Edin.; Camberwell House, London, S.E. (*Treasurer.*)
1889. Peacock, Dr., L.R.C.P. and L.M. Edin., M R.C.S. and L.S.A., Lond., Resident Medical Officer and Proprietor, Ashwood House, Kingswinford, Dudley, Staffordshire.
1881. Peeters, M., M.D., Gheel, Belgium. (*Hon. Member.*)
1870. Peddie, Alexander, M.D. Edin., F.R.C.P. Edin., F.R.S. Edin., 15, Rutland Street, Edinburgh.
1873. Pedler, George H., L.R.C.P. Lond., M.R.C.S. Eng., 6, Trevor Terrace, Knightsbridge, S.W.
1874. Petit, Joseph, L.R.C.S.I., Med. Supt., District Lunatic Asylum, Sligo.
1878. Philipps, Sutherland Rees, M.D., C.M. Qu. Univ., Irel., F.R.G.S., St. Anne's Heath, Chertsey.
1875. Philipson, George Hare, M.D. and M.A. Cantab., F.R.C.P. Lond., 7, Eldon Square, Newcastle-on-Tyne.
1888. Pietersen, J. F. G., M.R.C.S., Bannatyne, Etchingham Park, Finchley, London, N.
1886. Pilkington, F. W., L.R.C.P. Lond., Ass. Med. Off., Littlemore, Oxford.
1871. Pim, F., Esq., M.R.C.S. Eng., L.K. and Q.C.P. Ireland, Med. Supt., Palmerston, Chapelizod, Co. Dublin, Ireland.
1873. Pitman, Sir Henry A., M.D. Cantab., F.R.C.P. Lond., 28, Gordon Square, W.C., Registrar of the Royal College of Physicians. (*Hon. Member.*)
1878. Platt, Dr., St. James' Lodge, West End Lane, West Hampstead.
1877. Plaxton, Joseph Wm., M.R.C.S., L.S.A. Eng., Lunatic Asylum, Kingston, Jamaica.
1876. Powell, Evan, M.R.C.S. Eng., L.S.A., Medical Superintendent, Borough Lunatic Asylum, Nottingham.
1886. Powell, John, L.R.C.P., Senr. Asst. Med. Off., Joint Counties Asylum, Carmarthen.
1875. Pringle, H. T., M.D. Glasg., Medical Superintendent, County Asylum, Bridgend, Glamorgan.
Rayner, Henry, M.D. Aberd., M.R.C.S. Eng., Leam, Leamington. (PRESIDENT, 1884.) (*Late General Secretary.*)
1889. Raw, Nathan., M.D., M.P.C., Assistant Medical Officer, Kent County Asylum, Barming Heath, Maidstone.
1887. Reid, William, M.D., Royal Asylum, Aberdeen.
1886. Revington, Geo., M.D., Asst. Med. Off., Prestwich Asylum, Manchester.

1888. Reynolds, Graham H., M.B., C.M., Barnwood House, Gloucester.
1869. Richardson, B. W., M.D. St. And., F.R.S., 25, Manchester Square, W. (*Hon. Member.*)
1871. Robertson, Alexander, M.D. Edin., 16, Newton Terrace, Glasgow.
* Robertson, Charles A. Lockhart, M.D. Cantab., F.R.C.P. Lond., F.R.C.P. Edin., Lord Chancellor's Visitor, New Law Courts, Strand, W.C. (*General Secretary*, 1855-62.) (*Editor of Journal*, 1862-70.) (PRESIDENT, 1867.) (*Hon. Member.*)
1886. Robertson, A. L. Fullarton, M.B., C.M. Ed., St. Andrew's, Billing Road, Northampton.
1887. Robertson, G. M., M.B., C.M., M.P.C., Assistant Med. Off., Royal Asylum, Morningside, Edinburgh.
1876. Rogers, Edward Coulton, M.R.C.S. Eng., L.S.A., Co. Asylum, Fulbourn, Cambridge.
1859. Rogers, Thomas Lawes, M.D. St. And., M.R.C.P. Lond., M.R.C.S. Eng., Upton Cottage, Chester. (PRESIDENT, 1874.)
1879. Ronaldson, J. B., L.R.C.P. Edin., Medical Officer, District Asylum, Haddington.
1879. Roots, William H., M.R.C.S., Canbury House, Kingston-on-Thames.
1860. Rorie, James, M.D. Edin., L.R.C.S. Edin., Medical Superintendent, Royal Asylum, Dundee. (*Late Hon. Secretary for Scotland.*)
1888. Ross, Chisholm, M.B. Ed., M.D. Sydney, Gladesville Asylum, New South Wales.
1886. Roussel, M. Théophile, M.D., Sénateur, Paris. (*Hon. Member.*)
1884. Rowe, E. L., L.R.C.P. Ed., Assist. Med. Officer, Gloucester County Asylum.
1883. Rowland, E. D., M.D., C.M. Edin., the Public Lunatic Asylum, Berbice, British Guiana.
1877. Russell, A. P., M.B. Edin., The Lawn, Lincoln.
1883. Russell, F. J. R., L.K.Q.C.P. Irel., 4, Edward Road, St. Leonards-on-Sea.
1886. Rutherford, R. L., M.D., Medical Superintendent, City Asylum, Digby's, near Exeter.
1866. Rutherford, James, M.D. Edin., F.R.C.P. Edin., F.F.P.S. Glasgow, Physician Superintendent, Crichton Royal Institution, Dumfries. (*Hon. Secretary for Scotland*, 1876-86.)
1887. Rutherford, W., M.D., Consulting Physician, Ballinasloe District Asylum, Ireland.
1889. Ruxton, William Ledington, M.D. and C.M., Assistant Medical Officer, South Yorkshire Asylum, Wadsley, Sheffield.
1889. Samuelson, Gerald S., M.B. and C.M. Edin., late Junior Assistant Medical Officer, Wilts County Asylum, Devizes.
1879. Sankey, H. R., M.B., Boreatton Park, Shrewsbury.
* Sankey, R. Heurtley H., M.R.C.S. Eng., Medical Superintendent, Oxford County Asylum, Littlemore, Oxford.
1873. Savage, G. H., M.D. Lond., 3, Henrietta Street, Cavendish Square, W. (*Editor of Journal.*) (PRESIDENT, 1886.)
1862. Schofield, Frank, M.D. St. And., M.R.C.S., Medical Supt., Camberwell House, Camberwell.
1887. Schüle, Heinrich, M.D., Illenau, Baden, Germany. (*Hon. Member.*)
1884. Scott, J. Walter, M.R.C.S., M.P.C., Normanton, Lennox Road, Southsea.
1880. Seccombe, Geo., L.R.C.P.L., The Colonial Lunatic Asylum, Port of Spain, Trinidad, West Indies.
1879. Seed, Wm., M.B., C.M. Edin., Assistant Medical Officer, Whittingham Asylum, Lancashire.
1885. Sells, H. T., 2, London Road, Northfleet, Kent.
1881. Semal, M., M.D., Mons, Belgium. (*Hon. Member.*)
1882. Seward, W. J., M.D., Med. Superintendent, Colney Hatch, Middlesex.
1867. Shaw, Thomas C., M.D. Lond., F.R.C.P. Lond., Medical Superintendent, Middlesex County Asylum, Banstead, Surrey.
1880. Shaw, James, M.D., 63, Kensington, Liverpool.
1882. Sheldon, T. S., M.B., Med. Supt., Cheshire County Asylum, Parkside, Macclesfield.
1886. Sherrard, C. D., M.R.C.S., 23, The Avenue, Eastbourne.
1877. Shuttleworth, G. E., M.D. Heidelberg, M.R.C.S. and L.S.A. Eng., B.A. Lond., Medical Superintendent, Royal Albert Asylum, Lancaster.

1880. Sibbald, John, M.D. Edin., F.R.C.P. Ed., M.R.C.S. Eng., Commissioner in Lunacy for Scotland, 3, St. Margaret's Road, Edinburgh. (*Editor of Journal*, 1871-72.) (*Hon. Member.*)
1889. Simpson, Samuel, M.B. and M.C.H. Dublin, M.P.C., Assistant Medical Officer, Peckham House, Peckham.
1888. Sinclair, Eric, M.D., Med. Supt., Gladesville Asylum, New South Wales.
1870. Skae, C. H., M.D. St. And., Medical Superintendent, Ayrshire District Asylum, Ayrshire, Glengall, Ayr.
1875. Smith, Patrick, M.A. Aberdeen, M.D. Sydney, New South Wales, Resident Med. Officer, Woogaroo Lunatic Asylum, Brisbane, Queensland, Australia.
1858. Smith, Robert, M.D. Aberd., L.R.C.S. Edin., Medical Superintendent, County Asylum, Sedgefield, Durham.
1886. Smith, R. Gillies, M.R.C.S., B.Sc. Lond., Assistant Medical Officer, Lancashire County Asylum.
1885. Smith, R. Percy, M.D., B.S., M.R.C.P., M.P.C., Bethlem Hospital, St. George's Road, S.E.
1884. Smith, W. Beattie, F.R.C.S. Ed., L.R.C.P. Lond., Medical Supt., Hospital for the Insane, Ararat, Victoria.
1889. Smith, William Robert, M.D., D.Sc., F.R.S. Edin., 74, Great Russell Street, Bloomsbury Square, London.
1881. Snell, Geo., M.R.C.S., Asst. Med. Off., Berbice, British Guiana.
1885. Soutar, J. G., Barnwood House, Gloucester.
1875. Spence, James B., M.D. Ire., Med. Supt., Burntwood Asylum, Lichfield.
1883. Spence, J. B., M.D., M.C. Edinburgh, Asylum for the Insane, Ceylon.
1863. Spencer, Robert, M.R.C.S. Eng., Med. Superintendent, Kent County Asylum, Chartham, near Canterbury.
1879. Squire, R. H., B.A. Cantab., Assist. Medical Officer, Whittingham Asylum, Lancashire.
1888. Stearns, H. P., M.D., The Retreat, Hartford, Conn., U.S.A. (*Hon. Member.*)
1868. Stewart, James, B.A. Queen's Univ., M.R.C.P. Edin., L.R.C.S. Ireland, late Assistant Medical Officer, Kent County Asylum, Maidstone; Dunmurry, Sneyd Park, Clifton, Gloucestershire.
1884. Stewart, Robert S., M.D., C.M., Assistant Medical Officer, County Asylum, Glamorgan.
1887. Stewart, Rothsay C., M.R.C.S., Assist. Med. Officer, County Asylum, Leicester.
1862. Stilwell, Henry, M.D. Edin., M.R.C.S. Eng., Moorcroft House, Hillingdon, Middlesex.
1864. Stocker, Alonzo Henry, M.D. St. And., M.R.C.P. Lond., M.R.C.S. Eng., Medical Superintendent, Peckham House Asylum, Peckham.
1887. Stoker, Wm. Thornley, M.D., Surgeon, St. Patrick's Hospital, 16, Harcourt Street, Dublin.
1881. Strahan, S. A. K., M.D., Assist. Med. Officer, County Asylum, Berrywood, near Northampton.
1868. Strange, Arthur, M.D. Edin., Medical Superintendent, Salop and Montgomery Asylum, Bicton, near Shrewsbury.
1885. Street, C. T., M.R.C.S., L.R.C.P., Haydock Lodge, Ashton, Newton-le-Willows, Lancashire.
1886. Suffern, A. C., M.D., Borough Asylum, Winson Green, Birmingham.
1870. Sutherland, Henry, M.D. Oxon, M.R.C.P. London, 6, Richmond Terrace, Whitehall, S.W.; Blacklands House, Chelsea; and Otto House, Hammersmith.
1871. Sutton, H. G., M.D. Lond., F.R.C.P., Physician to the London Hospital, 9, Finsbury Square, E.C.
1868. Swain, Edward, M.R.C.S., Medical Superintendent, Three Counties' Asylum, Stotfold, Baldock, Herts.
1877. Swanson, George J., M.D. Edin., Lawrence House, York.
1887. Symes, G. D., M.R.C.S., M.P.C., County Asylum, Rainhill, Lancashire.
1881. Tamburini, A., M.D., Reggio-Emilia, Italy. (*Hon. Member.*)
1857. Tate, William Barney, M.D. Aberd., M.R.C.P. Lond., M.R.C.S. Eng., Medical Superintendent of the Lunatic Hospital, The Coppice, Nottingham.
1888. Thomas, E. G., M.B. Edin., Ass. Med. Off., Caterham Asylum, Surrey.

1880. Thomson, D. G., M.D., C.M., Med. Supt., County Asylum, Thorpe, Norfolk.
1878. Thurnam, Francis Wyatt, M.B. Edin., C.M., 40, South Grove, Highgate, N.
1861. Toller, Ebenezer, M.R.C.S. Eng., formerly Med. Supt. of St. Luke's Hospital, London, late Supt. of the Gloucester County Asylum, 10, Royal Crescent, Holland Park, W.
1885. Townsend, W. C., M.D., Visiting Physician, District Asylum, Cork.
1866. Tuke, John Batty, M.D. Edin., 20, Charlotte Square, Edinburgh. (*Hon. Secretary for Scotland*, 1869-72.)
1888. Tuke, John Batty, Junior, M.B., C.M., M.R.C.P.E., Resident Physician, Saughton Hall, Edinburgh.
* Tuke, D. Hack, M.D. Heidel., F.R.C.P. Lond., M.R.C.S. Eng., LL.D., formerly Visiting Physician, The Retreat, York; Lyndon Lodge, Hanwell, W., and 63, Welbeck Street, W. (*Editor of Journal.*) (PRESIDENT, 1881.)
1881. Tuke, Chas. Molesworth, M.R.C.S., Manor House, Chiswick.
1885. Tuke, T. Seymour, M.R.C.S., Manor House, Chiswick.
1877. Turnbull, Adam Robert, M.B., C.M. Edin., Medical Superintendent, Fife and Kinross District Asylum, Cupar.
1889. Turner, Alfred, M.D. and C.M., Assistant Medical Officer, West Riding Asylum, Menston, Yorkshire.
1878. Urquhart, Alexr. Reid, M.D., Physician Supt., James Murray's Royal Asylum, Perth. (*Hon. Secretary for Scotland.*)
1881. Virchow, Prof. R., University, Berlin. (*Hon. Member.*)
1881. Voisin, A., M.D., 16, Rue Séguin, Paris. (*Hon. Member.*)
1876. Wade, Arthur Law, B.A., M.D. Dub., Med. Supt., County Asylum, Wells, Somerset.
1884. Walker, E. B. C., M.B., C.M. Edin., Assist. Med. Officer, County Asylum, Haywards Heath.
1877. Wallace, James, M.D., Visiting Medical Officer, Parochial Asylum, Greenock.
1876. Wallis, John A., M.D. Aberd., L.R.C.P. Edin., Medical Superintendent, County Asylum, Whittingham, Lancashire.
1883. Walmsley, F. H., M.D., Leavesden Asylum, Watford, Herts.
1873. Ward, Frederic H., M.R.C.S. Eng., L.S.A., Assistant Medical Officer, County Asylum, Tooting, Surrey.
1871. Ward, J. Bywater, B.A., M.D. Cantab., M.R.C.S. Eng., Medical Superintendent, Warneford Asylum, Oxford.
1889. Warnock, John, M.D., C.M., B.Sc., M.R.C.S., Medical Superintendent, Northumberland House, Finsbury Park, London.
* Warwick, John, F.R.C.S. Eng., 25, Woburn Square, W.C.
1885. Watson, William Riddell, L.R.C.S. & P. Edin., Govan Parochial Asylum, Glasgow.
1880. Weatherly, Lionel A., M.D., Bailbrook House, Bath.
1887. Welsh, D., M.B., C.M., Assistant Medical Officer, Kent County Asylum, Barming Heath.
1880. West, Geo. Francis, L.R.C.P. Edin., Assist. Med. Officer, District Asylum, Omagh, Ireland.
1889. West, John Arthur, L.R.C.P., M.R.C.S., and L.S.A., 113, King Henry's Road, London.
1873. Westphal, C. Professor, Kronprinzenufer, Berlin. (*Hon. Member.*)
1872. Whitcombe, Edmund Banks, Esq., M.R.C.S., Med. Supt., Winson Green Asylum, Birmingham.
1884. White, Ernest, M.B. Lond., M.R.C.P., City of London Asylum, Stone, Dartford, Kent.
1889. Whitwell, James Richard, M.D. and C.M., Assistant Medical Officer, Wadsley, South Yorkshire.
1870. Wickham, R. H. B., F.R.C.S. Edin., late Medical Superintendent, Borough Lunatic Asylum, Newcastle-on-Tyne.
1883. Wiglesworth, J., M.D. Lond., Rainhill Asylum, Lancashire.
1866. Wilks, Samuel, M.D. Lond., F.R.C.P. Lond., Physician to Guy's Hospital; 72, Grosvenor Street, Grosvenor Square.
1857. Wilkes, James, F.R.C.S. Eng., late Commissioner in Lunacy; 18, Queen's Gardens, Hyde Park. (*Hon. Member.*)
1887. Will, Jno. Kennedy, M.B., C.M., M.P.C., Bethnal House, Cambridge Road, E.

1857. Willett, Edmund Sparshall, M.D. St. And., M.R.C.P. Lond., M.R.C.S. Eng., Wyke House, Sion Hill, Isleworth, Middlesex; and 4, Suffolk Place, Pall Mall.
1862. Williams, S. W. Duckworth, M.D. St. And., L.R.C.P. Lond., The Maze, Lansdowne Road, Bournemouth.
1863. } Williams, W. Rhys, M.D. St And., M.R.C.P. Ed., F.K. and Q.C.P , Irel.,
1878. } late Commissioner in Lunacy, Linden House, Bertie Road, Leamington. (*Hon. Member*).
1885. Wilson, G. V., M.D., Assist. Med. Officer, District Asylum, Cork.
1881. Wilson, Jno. H. Parker, H.M. Convict Prison, Brixton.
1875. Winslow, Henry Forbes, M.D. Lond., M.R.C.P. Lond., 14, York Place, Portman Square, London, and Hayes Park, Hayes, near Uxbridge, Middlesex.
* Wood, William, M.D. St. And., F.R.C.P. Lond., F.R.C.S. Eng., Visiting Physician, St. Luke's Hospital, formerly Medical Officer, Bethlem Hospital; The Priory, Roehampton. (PRESIDENT, 1865.)
1879. Wood, Wm. E. R., M.A., M.B., F.R.C.S. Edin., The Priory, Roehampton.
1869. Wood, T. Outterson, M.D., M.R.C.P. Lond., F.R.C.P., F.R.C.S. Edin., 40, Margaret Street, Cavendish Square, W.
1869. Wood, B. T., Esq., M.P., Chairman of the North Riding Asylum, Conyngham Hall, Knaresboro. (*Hon. Member.*)
1873. Woods, Oscar T., M.B., M.D. (Dub.), L.R.C.S.I., Medical Superintendent, Asylum, Killarney.
1885. Woods, J. F., M.R.C.S., Med. Supt., Hoxton House, N.
1884. Workman, J., M.D., Toronto, Canada. (*Hon. Member.*)
1877. Worthington, Thos. Blair, M.A., M.B., and M.C. Trin. Coll., Dublin, Med. Supt., County Asylum, Knowle, Fareham, Hants.
1865. Wyatt, Sir William H., J.P., Chairman of Committee, County Asylum, Colney Hatch, 88, Regent's Park Road. (*Hon. Member.*)
1862. Yellowlees, David, M.D. Edin., F.F.P.S. Glasg., Physician Superintendent, Royal Asylum, Gartnavel, Glasgow.
1882. Young, W. M., M.D., Assist. Med. Officer, County Asylum, Melton, Suffolk.
1874. Younger, E. G., M.D. Bruss., M.R.C.P. Lond., M.R.C.S. Eng., Asst. Medical Officer, County Asylum, Hanwell, Middlesex.

ORDINARY MEMBERS - - - - - - - -	386
HONORARY AND CORRESPONDING MEMBERS - - -	59
Total - - - - - -	445

We are indebted to Dr. Outterson Wood, of London, for the addition to the Members' names of the date at which they joined the Association. The labour involved in this useful work has been great.

Members are particularly requested to send changes of address, etc., to Dr. Fletcher Beach, the Honorary Secretary, Darenth Asylum, Dartford, and in duplicate to the Printers of the Journal, South Counties Press Limited, Lewes, Sussex.

List of those who have passed the Examination for the Certificate of Efficiency in Psychological Medicine, entitling them to append M.P.C. (Med. Psych. Certif.) to their names.

Anderson, John.
Armour, E. F.
Barker, Alfred James Glanville.
Bird, James Brown.
Black, Victor.
Bruce, John.
Bullock, William.
Cameron, John.
Calvert, William Dobree.
Carter, Arthur W.
Chambers, James.
Chapman, H. C.
Collie, Frank Lang.
Cope, George Patrick.
Cowper, John.
Cram, John.
Davidson, William.
Drummond, Russell J.
Donaldson, R. L. S.
Eames, Henry Martyn.
English, Edgar.
Evans, P. C.
Ezard, Ed. W.
Fitzgerald, Gerald.
Fraser, Thomas.
Fraser, Donald Allan.
Gemmell, William.
Goodall, Edwin.
Hennan, George.
Howden, Robert.
† Hyslop, Theo. B.
Keyt, Fred.
Hewat, Matthew L.
Laing, J. H. W.
Leeper, Richard R.
Macevoy, Henry John.
Mackenzie, John Cumming.
Macneece, J. G.
Macpherson, John.
Meikle, T. Gordon.
Melville, Henry B.
Monteith, James.
Moore, Edward Erskine.
* Mortimer, John Desmond Ernest.
Nairn, Robert.
Neil, James.
Nolan, Michael James.
Pearce, Walter.
Rannie, James.
Raw, Nathan.
Renton, Robert.
Rice, P. J.
Rigden, Alan.
Ritchie, Thomas Morton.
Robertson, G. M.
Rowand, Andrew.
Scott, J. Walter.
Stanley, John Douglas.
Staveley, William Henry Charles.
Steel, John.
Stewart, William Day.
Simpson, Samuel.
Slater, William Arnison.
Smith, Percy.
Symes, G. D.
Thompson, George Matthew.
Thorpe, Arnold E.
Turner, M. A.
Waterston, Jane Elizabeth.
Whitwell, Robert R. H.
Will, John Kennedy.
Wilson, G. R.
Wilson, James.
Wood, David James.
Zimmer, Carlo Raymond.

* To whom the Gaskell Prize (1887) was awarded.
† To whom the Gaskell Prize (1889) was awarded.