the latter state, however, there is still a great deal of stupor. She has frequently had to be tube-fed, is wet and dirty in her habits, and at times wakeful at night. Occasionally she recognises her relatives when they come to visit her, and seems glad to see them, but not always. Various forms of special treatment—thyroid feeding, lavage, morphia or opium hypodermically and by the mouth, and latterly over-feeding—have been tried without much apparent result, at least on the mental side.

It will be seen that this case, although showing a sometimes resistive stupor, with mutism, verbigeration, and a tendency to catalepsy at times, differs from the type of katatonia in the absence of marked heredity, of a maniacal stage, of exalted and religious delusions, and of any tendency to real remissions, while there has been marked depression all through. For these reasons (although I admit that further observation is required) it seems to me that this case cannot justly be set down as one of katatonia, but is a genuine instance of melancholia attonita, as distinguished from the former. If this is correct, the case is further interesting as showing that verbigeration may occur in an acute form of melancholia—a fact, if it be one, which has been expressly denied.

(1) Read at the meeting of the Irish Division at Enniscorthy, July 3rd, 1903.

Notes on the Treatment of Acute Cases. By R. R. LEEPER, F.R.C.S.I., Medical Superintendent, St. Patrick's Hospital, Dublin.

IF we trouble ourselves to look back and study the treatment of insane persons in olden times, we cannot but be struck by the fact that our forefathers regarded insanity as a disease which needed active treatment, and it generally received such at their hands; and that, however much the weird and sudden outbursts of religious frenzies, sudden seizures, and mad impulses were regarded as evidences of demoniacal possession, or God-inspired action, the patients so affected, and rendered conspicuous by their conduct, received at the hands of their fellow-creatures treatment which, however curative in intention, must have tended rather to elimination than recovery, and in

this respect differed little from that meted out to the physical illnesses, wounds, and accidents of the patients of bygone times.

Yet the treatments which were carried out were largely thought to be curative; and we find men as assertive of the benefits to be derived from a diet of apples, from frequent scourgings with sticks, and rapid revolutions in specially constructed chairs, of the administration of hellebore and borage, and many other means regarded by us as either useless or ingeniously cruel, as men are to-day of the benefits to the insane of costly and home-like surroundings, freedom of action, the use of organotherapy, and all our modern methods of treating the insane which we daily put in practice.

One of the first difficulties in dealing with an acute case of insanity presented to us is that it is often impossible to promptly classify an individual case so as to place it under a distinct heading, and much valuable time may be lost in the mere contemplation of the case by the most energetic of us before we can decide to commence that active treatment which is demanded of us if the patient is to owe his recovery to our intervention—time which may mean the coagulation necrosis, and chromatolysis of the nerve-cell, and the death mayhap, of the infinitely complex organ whose mere functional disturbances are so alarming, whose comparatively slight organic changes mean physical wreckage and an *intra vitam* mental death.

What, then, can be done to remedy the evils of vague and excessive classifications so as to more quickly develop the dark negative and bring out the clear picture of the mental state of our patients? Can we as yet but empirically treat a disease which we can but also vaguely, symptomatically, and empirically classify?

I think it may be possible ere long for those of great ability and with scope for their labours to select one acute and sharply defined mental disease and devote all the annual work of our laboratories and hospital wards more directly and particularly to it and its therapeutic and clinical aspects. Let all in asylums give the selected disease a steady and continued investigation. If this were done it would focus the work of many able men on this one object, and it seems to me would be more productive of advance in knowledge than the more largely conceived and varied investigations by individual workers, no matter how productive of good such work has

undoubtedly been in the past. Let us never forget that the barbarisms of the past were thought to be curative. Men have recorded their opinions of such treatment in eulogistic terms, and they undoubtedly were credited with effecting cures in their day.

"All roads lead to Rome," and in the estimation of the value of one particular treatment it must be ever borne clearly in our minds that recoveries have so far resulted from many apparent causes (as treatment in asylums is very varied), and that the good result may possibly be due to time, opportunity, or individual peculiarity more than to the course of treatment we are inclined to attribute it to.

In writing this paper I have not brought anything new before you, nor do I intend to announce to you the successful application of some new remedy followed by the hasty enumeration of a series of recoveries by its use; but I wish to frankly acknowledge the personal difficulties of one who is, like those whom I address, daily seeking through comparative darkness for more efficient weapons wherewith to treat an ever-present mischief, for a more certain and efficient means to cure the diseased minds of those who are daily entrusted to his care.

With an increase of knowledge professional differences of opinion as regards the value of treatments must die out, and our art and science must gain in public esteem and usefulness. Let us, then, do something more than heretofore to produce this unanimity, so that each one may feel a confidence in the carrying out of a remedial course which has received the unqualified approval both of the scientifically and clinically minded of the psychologists of to-day. If we regard the noisy restlessness, verbigeration, and incoherence of the maniac as we regard the dulness on percussion, and rusty sputum, of a patient suffering from pneumonia-merely as the symptoms which enable us to classify and promptly treat their respective diseases, -surely there is as much reason to treat with uniformity the mental as the physical disease; and in securing the best and most successfully uniform treatment our best efforts must be used in the interests of our race. Each new suggestion for the application of new remedies ought to receive as much attention, and record, and investigation by different hands and different minds in our mental as in our general hospitals; and I think that uniformity on lines of recognised treatment is as

imperative, and will undoubtedly be as practicable with us in asylums as it is in general medical and surgical practice.

At present, if it were asked of us what drug or medicinal means we used to treat our last twenty acutely maniacal or melancholic patients, we would be puzzled to find an answer. Yet a goodly number recovered, and one is ever inclined to attribute the recovery to one or other of the therapeutic measures we adopted; but what ultimately effected the change we are loth to say. Even of the patients chained to the walls of the old asylums it is recorded that some recovered and were discharged as cured. And we who are faced with the treatment of the insane of to-day can but say that, however uniform our treatment is as regards kindness and the provision of amusements and comfort of our people, we have yet much to do in the provision for them also of a more systematised medicinal treatment.

I fancy that it has been the feeling of most of us at times that we were engaged in a very unequal and single-handed contest, and the feelings of a psychological therapist might not inaptly be described as similar to those of a naked fencer with an armoured adversary who responds to his most furious onslaught by a calm indifference, or some unlooked-for and outlandish response to his attack, which leaves him almost bewildered, or helpless and dismayed. He must, however, again think out some new line of treatment, some new method of attack; and happy is he if he can discern a joint in the armour, or secure a response to his efforts.

I have selected a few of my cases as being of sufficient interest to bring before you as examples of the somewhat bewildering difficulties of treating acute patients. They are intended to show you that recovery does occur apparently as the direct result of drug treatment, and that apparently somewhat similar cases sometimes recover without any specialised drug treatment at all, and that until our knowledge increases I fear I shall be unable to increase my annual recovery rate beyond its present average, viz., 53 per cent. on my annual admissions.

The first case I wish to record is the remarkable case of A. D—, admitted to St. Patrick's Hospital August 1st, 1900, æt. 33 years, barrister-at-law, suffering from delusional insanity. This patient had been deported to Scotland, and had been under treatment in the

Murray Asylum in 1898, and in the Crichton Royal Asylum in 1899. He had been travelling with attendants in England prior to his being admitted here. He was brought to the hospital with his legs tied together with ropes, to facilitate his journey back to Ireland. His present attack, which was of two years' duration, began with the usual symptoms of an on-coming melancholia—sleeplessness, restlessness, -and he complained of a feeling of numbness of his skin, and a great and irrational anxiety lest he should be unable to support himself and his wife. I was told he masturbated frequently and shamelessly, and he was treated for this condition by a Dublin practitioner, who circumcised him. Being none the better for this proceeding, he was taken to London, where another surgeon, presumably with a more artistic sense of proportion, re-circumcised him. After these proceedings he was removed to Scotch asylums, where he remained for two years. On admission here he was in an apparently stuporose and partially demented state, very resistive and violent if interfered with or made to move, refusing to speak or answer questions, swaying his body from side to side, chewing his clothes, and sucking his fingers. It generally took four strong attendants to give him a bath or move him to the grounds for exercise. He daily chewed the sleeve or collar off a coat, and frequently destroyed both a coat and waistcoat a day. If asked to cease destroying his clothes he denied doing so, and his condition might be described as one of negativeness. If asked did he like Dublin, he replied, "This is not Dublin;" and when shown the well-known Wellington Monument in the park, which can be seen from the hospital windows, he still refused to recognise his country. If one bade him good morning, he replied, "This is not morning;" if good night, "This is not night." If asked to look at a flower in the grounds his response was, "That's no flower." If we pointed out the sun to him we were told, "That's no sun." During this stage of his illness he was exceedingly wet and dirty in his habits, daily passing urine and fæces in his trousers, while standing swaying his body from side to side. During the period which elapsed between his treatment in Scotch asylums and his admission here, he had his hands tied nightly to the bedposts in order to prevent his masturbating, and for long after his admission here he slept with his arms raised above his head as the result of this treatment. He never was observed to masturbate after his admission here.

His pupils were normal and reacted to light and accommodation, his organs healthy, and a small quantity of sugar was found in his urine on admission, sp. gr. 1030. He was treated for this by 1 gr. codeia being administered daily, and the sugar disappeared shortly after admission and did not afterwards complicate the case.

His muscular system was exceedingly rigid and his reflexes slightly exaggerated. His condition being unaltered on September 17th, 1900, he was put to bed, and thyroid extract administered in 5-gr. doses, gradually increased till he was taking 50 grs. per day. This treatment was discontinued on October 20th, there having been no reaction whatever or good results obtained apparently by its use.

The note on February 14th, 1901, describes him as standing all day long at the ward door, rushing violently out whenever he could, and

then standing aimlessly outside, refusing to either go on or go back, rocking his body from side to side, and as wet and dirty in his habits as a general paralytic; the note in the case-book being that he shows no sign of intelligence. He had ceased chewing his clothes fourteen months after admission. It was observed in July, 1902, that a slight change had occurred, that he would answer questions and speak rationally, and showed a decided taste for riddles and conundrums, which he always tried to answer if asked in a joking way by the attendants. He was again put to bed and treated with large doses of thyroid extract, which seemed to produce no effect whatever, neither a rise of temperature nor a more rapid pulse-rate being observed to occur from its use, nor did it seem to reduce his weight. His physical health continued excellent.

On October 9th, 1902, the first noticeable change occurred. He still stood about the doorways, but looked more intelligent and increased slightly in weight. He steadily and gradually improved, and was completely recovered about May 1st, 1903, nearly three years having elapsed since his admission to the hospital; and in the fifth year of his illness his recovery took place. He has a distinct recollection of all that occurred around him during his apparently stuporose state, and he even recalled to my mind the efforts I had made a year ago to draw him into conversation, and recollected the very words I spoke to him, both then and afterwards. He has a distinct and accurate memory of all his experiences both here and in England and Scotland during his illness.

A short period prior to his discharge it was discovered that he suffered from thread-worms in his intestines, which were immediately actively treated and eliminated. Whether the presence of these parasites was the *fons et origo* of the diseased state I cannot say. The illness,—which commenced by peripheral nervous irritation of the genitourinary tract, as shown firstly by the self-abuse and glycosuria, and subsequently by the chewing of the clothes and muscular rigidity,—may have been the result of a visceral reflex irritation caused by urates. The remarkable recovery in this case, the clinical treatments by thyroid and codeia, and lastly, the exhibition of vermicides, may be my excuse for reporting to you at such length a case which is the most remarkable I have seen for some years.

Case 2.—M. C—, an unmarried girl æt. 20 years, admitted to hospital September 14th, 1901, suffering from acute melancholia. Father committed suicide by cutting his throat. Brother believed to have also committed suicide. Present illness of four months' duration, and believed to be due to business worries and a severe wetting during a menstrual period, which was supposed to have produced amenorrhæa, from which she suffered, and for which she was taken to a gynæcologist. She last menstruated six months prior to her admission. The night after her visit to the gynæcologist, who examined her pelvic organs, she started out of bed, broke the lamp, and made a most determined attempt to cut her throat with the broken fragments of glass. Her mother, who was sleeping in the same room, could not prevent her severely lacerating her throat. On admission she was

found to have several deep lacerated wounds and one deep punctured wound which was in very close proximity to her carotid artery, but had not opened the large blood-vessels of the neck. She was in a semi-stuporose state, her circulation very feeble, her hands blue; she was sleepless at night, and answered questions very slowly. Her pupils are very variable, at times widely dilated and a few hours later contracted; constantly picking her finger-nails, and at times weeps and cries bitterly, saying she is ruined and disgraced, and that everyone is calling her names. Suffers from hallucinations of hearing. Her reason, she says, for attempting to commit suicide was that she knew her mother was going to kill her, and in order to save her mother from sin and subsequent punishment, she decided to destroy herself. Examined carefully, we detected distinct crepitation at apex of right lung.

She improved very much and did a good deal of nurse's work in the ward, and said she would wish to become a nurse. Says she suffers no annoyance from voices now, two months after admission, and is bright

and cheerful in her manner.

In December she had a relapse, and seemed to be as melancholic as on admission. Her catamenia, which had now been absent for nine months, returned, and she suffered more from her old hallucinations and depressing delusions than before. Towards the end of December she again became bright and cheerful, and was occupied at house-work; grows worse towards evening.

In January she had another fit of depression, and seemed to be as bad as on admission, saying she is to be killed, and imagining she has

brought some vague misfortune upon all belonging to her.

She again became bright, and again depressed, during February and March. Menstrual periods are now normal as regards both time and quantity. Her hands are blue and her general circulation feeble, but her physical health is much improved, and her lung trouble has apparently disappeared. Her condition of alternating between depression and brightness continued, and on March 2nd I decided to put her to bed and give her a course of thyroid extract. On March 15th, 1902, whilst undergoing this course of treatment, she jumped out of bed suddenly and rushed to the window, breaking the glass, and was prevented by the nurse, with difficulty, from injuring herself. Says she has ruined her family.

She was still kept on the thyroid extract, and on March 22nd the thyroid treatment was stopped, as her temperature was raised and her pulse and respirations increased in frequency. Mental state very variable, one day depressed and one day bright, but alternation more frequent; she gradually lost the fits of depression, and left the hospital almost recovered on March 31st, 1902. I have made inquiries recently and find she is quite well, and has had no recurrence of her trouble since she left us. This is a case in which the thyroid extract seemed to produce a very desirable result, and to hasten, if not absolutely to cause, her recovery.

The next three cases which I shall simply describe received no specialised drug treatment at our hands, and yet recovered, and have since leaving us done well, and have had no return of their illnesses.

Case 3.—R. J. H—, male, æt. 21, clerk and book-keeper, admitted July 29th, 1901. Sister had been patient here and recovered. Whilst on a fishing excursion this patient wrote out a dying statement for his family's benefit, and with a penknife opened his radial artery. Medical help was at hand, and the patient was promptly admitted here.

His condition on admission was one of profound depression. He said he had ruined us all, that he had contracted syphilis, which was untrue, and that he would give us all this disease. He remained in a semi-stupid, delusional state for three months after admission, when he developed acute mania, became again suicidal, and required the padded room at night. Noisy and restless. This condition was not long maintained, and he again became melancholic and depressed.

He remained in this state for some months, alternating between exaltation and depression, and it was remarkable that as soon as he became restless and talkative sordes appeared on his lips, and his tongue became furred. I ordered him salicylate of bismuth, 10 grs., three times daily, and again a course of calomel, 5 grs., and salol in 3-gr. doses during his periods of gastric disorder and mental excitement. He gradually recovered, and I had recently a letter from him saying he is well, and has been employed in farming work, and is leading an open-air life in one of the colonies. The only drug treatment used in this case was the course of intestinal antiseptics, which may have shortened his attack or hastened his recovery.

The next case I shall mention to you is one of some interest in connection with the article by Dr. Bruce which appeared in the last issue of the *Journal of Mental Science*. Dr. Bruce, you will remember, claims to have discovered and isolated a bacillus which presumably causes mania. By the hypodermic injection of turpentine, he produced an aseptic abscess, which, according to his experience, seems to have a remarkably curative action upon this disease.

M. W—, a stout lady, æt. 50, was troubled with gouty eczema of her legs for years. A "gamp" nurse was employed to look after her in her own home. She was of temperate habits, and had never been previously insane. Her father and mother had been insane; brother eccentric. Admitted to St. Patrick's Hospital from a private asylum on February 2nd, 1903.

The history of her attack was as follows:—She rushed out of her house into the street in her nightdress, pursued by her nurse, who endeavoured to control her. Both patient and nurse were arrested by the police and removed to the station, where the former was recognised to be insane. She was subsequently sent to a small private asylum, where her furiously maniacal condition was controlled by a strait-waistcoat; she was there found by our nurses tied to a portmanteau and was admitted here in a condition of acute mania. For a fortnight after her admission she shouted and rolled on the floor, and was with difficulty prevented from injuring herself. She tore her clothes and was violent to those about her. On February 13th the note in the case-book states that she is almost rational, quiet, and the excitement has passed off; is much distressed by the recollection of her recent illness, and appears to have suddenly changed for the better. It is most interesting to note that at

this period of sudden recovery a small abscess formed on the sole of her foot at the metatarsal phalangeal joint under the great toe, as the result, I fancy, of the continuous dancing and jumping on the floor. Her foot was much swollen, and after freezing the part I made an incision into the abscess, evacuating a drachm or two of healthy pus. From this time on her mental state cleared up, and she almost completely recovered by the 25th of last month, and was transferred to St. Edmundsbury, and is shortly to be discharged. The old gouty ulcer on her leg has healed, and she is in robust physical health. A microscopical examination of her blood shows that her white blood-cells are lymphocytes and polymorphonuclear leucocytes. No leucocytosis; a leucopenia, if anything, being noticeable. It will be interesting, therefore, to note if the recovery will remain permanent. She was discharged, and remained a month at home, but has relapsed and had to be readmitted in a sub-acutely maniacal state.

M. A. S.—, æt. 42 years, admitted March 13th, 1903. Unmarried. Second attack. Duration previous to admission, three to four weeks. Cause of attack unknown. Family history unknown.

Previous history.—She had acute rheumatism when about twenty years old, which left no complications. Ten years ago she had an attack of melancholia, which lasted about six weeks; she was treated at home and recovered perfectly, but since that she was subject to occasional fits of extreme depression. The present attack began about three or four weeks before admission, with insomnia, change in habits, and depression.

When admitted to hospital she appeared to be in good physical health, but was very silent and depressed. She answered questions in a slow, hesitating, and incoherent way. Her memory, both recent and remote, was a blank. Her urine contained a large amount of urates, but otherwise was normal. She had hallucinations of sight and hearing. She slept badly at first, and was treated as follows:—Potass. Bromidi, 3j; Mag. Sulph., 3j; Aq. Chlorof. ad 3viij; Sig. 3ss ter in die.

After admission and during the month of March she remained in a stuporose condition, with occasional outbursts of impulsiveness, during which she broke windows and pictures and threw articles of furniture about the wards. Her memory remained a blank, and her statements in answer to questions were very irrational, such as that she had lived at one place for 1000 years. In the beginning of April she showed some signs of improvement; she attempted to do some sewing. She was sent out for drives very often, but as yet she took little interest in her surroundings. She was put on a tonic (Easton's syrup). By April 11th she was greatly improved; she was bright, more active, cheerful, and talkative; her memory for recent events was coming back, but that for the time of her present acute attack was still a blank. A week later she was apparently quite sane. She had no recollection of her attack, or the events preceding it. She stated that she often goes over two menstrual periods without being unwell, but that now she was more regular than formerly. She was last unwell in February, 1903. She complains of occipital headaches, for which she has been in the habit of taking antipyrine. She left hospital on April 18th, 1903, and has made a good recovery and resumed her occupation.

J. M—, æt. 42 years, admitted April 21st, 1902. First attack. Cause, business worry.

History.—Patient's family were stated to be nervous, but no other history of neuroses or insanity. Patient was of sober habits; he had suffered from rheumatism seven years before admission. Duration of existing attack, four months. He attempted suicide by throwing himself from the Irish mail between Rugby and Holyhead, and also threatened to end his life on different occasions.

On admission.—Patient's bowels were constipated. Urine normal except for presence of urates. Heart-sounds normal; pulse normal in rate, but bounding and of high tension. Lungs normal. He was silent and self-absorbed, with depressing hallucinations of sight and hearing. He said he was being watched and followed by policemen, and was to be charged with some imaginary crime, that he was ruined, and that his employees were leaving his service; he stated that he was tired of his life, and would take measures to end it. During his stay in the hospital he was usually in a state of depression, worrying about his business, which he thought was to be sold out because he saw some advertisements of auctions in the papers. He thought his children were dead or not at home, and he stated that at night his back was being burned with a red-hot poker, and that he was to be burned alive or killed by me. Sometimes he got out of this mood and was bright and somewhat cheerful and very talkative, taking part in outdoor and indoor games and doing a little gardening; continually pulling the hair out of his head and beard. Patient remained in this condition till September 12th, being then quite as delusional as on admission; very irritable and depressed during the day-time, but sleeping well at night.

On September 27th patient was much improved mentally, clear in conversation and rational and comparatively sane, and on October 3rd he was removed home by his friends, being then quite well. He called at the hospital in the beginning of this year; he was then in perfect health, and had been working at his business for some months.

E. A. S.—, æt. 39, admitted December 10th, 1901; unmarried. First attack. Causation: predisposing, over-strain nursing relations; exciting, love affair.

History.—No insanity or other nervous disease in family. Patient had been ill about six weeks before.

Admission.—She seemed to be in good general health, a well-nourished, intelligent lady. She was in a very restless and despondent condition. She believed that the devil had taken possession of her, and that her entrance here was the first step towards the infernal regions.

Heart-sounds normal; pulse of high tension; lungs normal; eyes and sight good, but pupils were dilated and non-contractile to light. Bowels constipated; urine acid, abundant urates, but otherwise normal. Patient was stated to have a tendency to suicide. She was put on the following

mixture:—Potass. Bromide, 3j; Magnes. Sulph., 3j; Tinct. Hyos., 3ij; Spts. Menth. Pip., 3ss; Aq. Chlorof., ad 3 viij; Sig. 3ss ter in die.

During her stay in the hospital patient's condition was variable up to the first week in March, 1902. The day after admission she threw her gold ring into the fire. She said it belonged to the devil. Usually despondent and restless, with depressing delusions; sometimes she brightened up considerably and chatted with those around her, saying she wished she could resist her depressing emotions; and occasionally she did some needlework. She was ordered an iron tonic on February 1st. In the beginning of March she seemed to improve very much. She was bright and cheerful, and rational in manner. She stated that her former depressing thoughts had no effect on her now. Her memory and powers of observation appeared to be normal, and, having continued to improve, she left the hospital on April 29th, 1902, perfectly well. This was a case of what one might term an accidental insanity caused by the strain of anxiety and nursing several aged and infirm relatives in their last illness. She has since married and is perfectly well, and has had no return of her troubles.

These three cases are of interest as showing the recovery of three patients who were treated in no very special manner, and who all suffered from acute and recent insanity, and all of whom recovered.

I don't desire to weary you with the stories of other patients who have been treated in our old hospital, and who, affected in somewhat similar ways, apparently often owe their recoveries to different treatments. What I wish to impress upon those engaged in similar work to my own, is the fact that we are undoubtedly often prone to attach a fictitious value to some of our curative means; and to hope that, in carrying out—as we always will carry out—new and ever-advancing methods of dealing with the mental diseases of our patients, we will not hastily accept any fixed lines until we have found them to be the best available in our present state of knowledge.

Let us endeavour to separate the drug of spurious from that of real value. It seems desirable that we should more speedily discard those drugs which we have weighed in the scales of past experience and knowledge and found wanting, and be ever more careful that whatever new drugs are substituted shall not hold the field one day longer than their utility and effectiveness entitle them to.

The great difficulties of solving the problems of psychiatry are only rendered greater by a too hasty conclusion as regards the actual and relative values of new drugs and new treatments; whilst on the other hand it may not be uninstructive to remember that personal respect for Galen and Hippocrates XLIX.

caused many disciples to follow blindly for centuries the erroneous views of these great fathers of medical science, thereby hindering the ever-onward march of true knowledge, obtainable only as the result of personal scientific observation, enterprise, and investigation, and an ever-widening school of thought.

Discussion

At the Meeting of the Irish Division at Enniscorthy, July 3rd, 1903.

Dr. Drapes said that Dr. Leeper had remarked in his interesting paper that recovery was due sometimes to systematic and sometimes to special treatment, while sometimes it took place with no treatment at all. He thought that it was more difficult in insanity than in any other disease to say whether or not recovery was actually due to the measures used. He regarded simple nursing, with supporting and, where necessary, sedative treatment, as the principal remedial agent in acute cases. Intercurrent bodily disease sometimes did improve the mental state, as in a recent case admitted with wounds on the hands, in which resulting septic abscesses seemed to have a favourable influence on recovery. Rest treatment he regarded as one of the best at our disposal. He had lately had a patient suffering from adolescent insanity who had become worse from being sent into the open air, whereas rest in bed resulted in very considerable improvement.

Dr. Dawson, referring to the stress laid by Dr. Leeper on uniformity of treatment, was of opinion that although uniformity of principle was desirable, as, for example, the broad principle of seeking to influence the mental state by improvement of the bodily nutrition, every case should be treated on its own merits, and not by any hard and fast method. Some cases did better with rest, others with open-air exercise, while in others good results seemed to be got from the prolonged bath; it was necessary to try method after method until the one to suit the individual case was found. With regard to the case in which there was glycosuria, he was coming to the belief that sugar in the urine, if transitory, was of little importance, and he even had a patient suffering from persistent glycosuria who was in good bodily health and actually putting on weight. Aspirin, as recommended by Williamson, gave good results in lessening the sugar excreted. The effect of intercurrent febrile conditions, like that induced by thyroid extract, was probably to be explained by the anabolic reaction which followed increased katabolism; but the method of turpentine abscesses had been tried in Italy and discarded. He thought the difficulty as to whether or not recovery was to be attributed to treatment arose in other diseases as well as mental.

Dr. Nolan remarked that one most important method of treatment had been overlooked by previous speakers, and that was the moral treatment, to which he attached the highest importance, particularly with regard to chronic cases.

Dr. Norman desired to protest against the apparent distinction drawn in the preamble to the paper between "scientific" and "clinical" observation. Clinical observation is scientific, for science is knowledge and facts are facts whether they are observed at the bedside or in the laboratory. They had heard of a recovery rate of 53 per cent., but such a ratio is only obtainable where cases for admission are selected with a view to curability. He wished he could believe that the practical results of modern methods would prove so very much better than those which had been attained when the old-fashioned methods were in vogue, which are now so contemptuously spoken of. He had been much interested in the first case described, having been acquainted with the patient. Two important facts in this case were the existence of a bad heredity (a brother being insane) and the recent marriage of the patient. With regard to the latter point there was perhaps a moral as well as a physical factor, since the immediate apparent cause of the attack was anxiety lest he should be unable to support himself and his wife. As regarded glycosuria, he agreed with Dr. Dawson that it did not seem of much importance in this case.

Dr. LEEPER, in reply, thanked the meeting for the reception accorded to his paper, the main object of which was not to advocate the treatment of patients in bulk, but to give such examples as might furnish tangible facts for the treatment of cases individually. In treating pneumonia, for instance, one knew what measures to adopt without delay, and it would be desirable that one should be able to treat acute insanity as promptly. Rest was a very good treatment in certain cases, but in many it was difficult to adopt. As regarded Dr. Norman's remarks with reference to his statement about clinical and scientific observation, he had no intention of creating the schism of which he had been accused. What he wished to advocate was that clinical and laboratory research should work conjointly for the elucidation of mental disease.

Notes on a Case of Graves' Disease with Mania. By J. P. GRIEVES, M.R.C.S.Eng., L.R.C.P.Lond.

THE following case is one of chronic Graves' disease suddenly taking on an acute form with mania and resulting in death in fourteen days, with pyrexia during the last week, there being no pulmonary or other complications.

The patient, a married woman æt. 43, had never been treated for Graves' disease, but I had by chance noticed that she had very marked proptosis at least twelve months before attending her.

About three months before the onset of the acute symptoms, the patient, who had previously been rather an economical person, began to spend money very freely, going out and ordering large quantities of useless things, on one occasion £17 worth of plated goods, including a dozen butter knives!

When she had run up bills to the extent of £150 she confessed to her husband, who was naturally very angry, being a man of limited means; and in the heat of the moment he remarked that they were ruined, which appears to have made a great impression upon the patient, and for at least a month she remained entirely indoors to avoid being tempted to buy things. On April 24th I was called in to see her, and found her in a state of great distress and excitement, pacing about the room and exclaiming that they were ruined, that her child was starving, and that it was all her fault. She declared there was nothing to eat in the house, though they had just finished a meal.

On April 25th the patient was quiet but seemed very depressed, as if brooding over things; in the evening she again became very excited, rushing about the room and exclaiming that they had no money, although to convince her her husband produced a handful of gold from his pocket. This attack of excitement passed off in about an hour, and she then discussed the matter with me quite rationally, and said she did not know what she was doing when these attacks came on. During the night she again became very violent, and could not be induced to stay in bed.

On April 26th I kept her in bed and obtained a mental nurse for