the callosal and marginal gyri of the internal surface, or in the gyri operti of the island of Reil. At the occipital extremity of the hemisphere the convolutions have most tortuous communications with each other. The ascending parietal convolutions are characterised rather by varied relations with distant parts, while the frontal gyri have at the same time free and complicated inter-communications and numerous connections with other convolutions.

It is hoped that a fuller knowledge of the structure of the cerebral hemispheres, the instrument of thought, will give greater precision to our speculations on the physiology of thinking; it will certainly afford a firmer basis for the application of pathological facts to the elucidation of physiological problems.

The Medical Treatment of Insanity. By T. S. Clouston, M.D. Edin., Medical Superintendent of the Cumberland and Westmoreland Lunatic Asylum.

(Read at a Meeting of Members of the Medico-Psychological Association, held in Edinburgh, at the Royal College of Physicians, 25th November, 1869.)

Might it not be possible greatly to extend our knowledge of the effects of medicines in insanity by treating similar classes of cases in all asylums in a similar way for a certain time? Might we not in this way arrive at a much greater degree of scientific accuracy in our treatment of certain forms of insanity than we are able to practise at present?

I venture to bring forward those questions for discussion at this meeting because I think that we shall all agree that the medical treatment of insanity is a most important subject, and that at present the looseness and divergence of opinion in regard to this, the corner-stone of our specialty, is most unsatisfactory; nay, is almost scandalous. When I saw that there was nothing on our programme of business directly relating to this subject, but that all communications would be received, I informed our Secretary that I should bring forward this paper; not that I consider myself in any way specially qualified to treat the question as it deserves, but because I do not think that even our first meeting should pass over without our attention being directed to it. If any other consideration were needed to make us consider this

question, it would be the recent proof of diversity of opinion as exhibited by the Scotch Asylum physicians in the Report of the Commissioners in Lunacy. Their disagreement is not about details merely, but about first principles.

Where the dissidence of opinion is so vast that one physician of great experience and ability expresses his conviction that the "potentiality" of drugs over cerebral disturbance is "confined within very narrow limits," and that the "problem" as to how they may be applied "in any given case" is "so difficult of solution as to render such application all but impracticable;" and another younger psychologist declares that "a more than usually careful examination has shown that 70 per cent. of the recoveries were directly due to the influence of medicine," a perplexed public may well ask if this is a common case of doctors' differences. The former relegates the whole question to "our young and aspiring psychologists" as a "useful exercise" for their minds in short-lived sensational therapeutics; the other looks on "all other agencies" "as secondary to the medical." Can we not assist in bringing Dumfries and Inverness somewhat nearer to each other?

So many of the members of this northern branch of our association having recently thought about the matter, and reduced their thoughts to the definiteness of black and white, they should be well able to discuss it in a fruitful manner.

It cannot be denied that as asylum physicians we have most rare and special opportunities of acquiring accuracy in our knowledge of the medical treatment of insanity. All our patients breathe the same air, eat the same food, wear similar clothing, get up and go to bed at the same time, and are entirely under our control. Our branch of the profession has the advantage of all its other branches in these respects. In no hospitals can the numerical method of research be so satisfactorily and precisely applied as in hospitals for the insane; and whatever may be said against it, the numerical method approaches more nearly to the accuracy of the physical sciences than any other mode of solving medical problems.

The preceding remarks are vague and general. I think the discussion will be better advanced by my proposing something definite. I do not for a moment think that the following plan is the best or the only one, but if it ventilates the subject, and is improved into something practicable, or leads to the formation of a committee to carry out some other scheme, it will have served its purpose.

Method of Working.—What I propose is that we shall all become fellow workers after a fixed plan. That we shall each in his own asylum treat certain of our patients whom we may agree to regard as belonging to the same classes, in the same way; that we shall keep accurate records of such treatment in forms or schedules agreed on, so that after we have a sufficient number of cases they may be collected, and may lead to a trustworthy generalization. But how can all this be done?

Classes of Cases most Suitable.—In the first place we must fix on a classification sufficiently distinct to enable us to place each case with certainty in its class. I think it would be quite sufficient at first to take certain well marked and definable groups, and only those. I do not think that any of the ordinary modes of classification can be taken in its entirety. I see no objection to take certain classes grounded on a pathological identity, others resembling each other in symptoms merely, and others depending on a common cause. We cannot very well do otherwise in the present state of our knowledge. We can merely take those cases most fixed in their causes, symptoms, and ordinary course.

Of the more incurable forms of insanity, I think general paralysis, epilepsy, periodic mania with pretty regular exacerbations, chronic mania with marked impairment of mind, and marked senile mania, would be most suitable. I think there would be no difficulty in our diagnosing any of those forms of insanity, and no fear that we all should not attach the same ideas to each of those terms.

Of the curable forms of insanity, which are sufficiently well marked in character to establish a real connection between different cases of the same group, and distinct enough to make our diagnosis easy and sure, I think that the insanity of pregnancy, that of child-birth, that of lactation, that of change of life in women, acute mania with delirium and complete incoherence, melancholia consisting of simple depression without fixed delusions, and mild mania recent without fixed delusions and without incoherence, would admit of the least liability to errors.

All cases which we could not put into any of the above groups, we should not schedule or report. Every doubtful case should also be omitted.

Examination of Patients.—When we admit a patient, how are we to set about examining him, and recording that examination? To do this satisfactorily, we must have forms to substitute for, or to supplement our present "Case Books." We must reduce and systematize our information as to the

patients' history and symptoms under certain headings, and rigidly exclude the flowing periods and the sensational incidents of our present case books.

Those headings as to history would relate to the causes of the patient's malady, predisposing and exciting, its duration, its first symptoms, mental and bodily, and the changes in those symptoms. To bring all the information which we should acquire at the time of our first examination of the patient under systematic headings would be more easy. The mental symptoms might be classified under excitement, depression, coherence, ability to answer simple questions, memory, and delusions. The bodily symptoms might come under appearance, nervous system, lungs, heart, pulse, tongue, temperature, weight, state of retina, appetite, organic disease, or disordered function of any other organ.

After this examination, a stated time for each class would require to be fixed on for leaving the patient alone, watching and recording his symptoms, and noticing the effect of the change of scene and diet. This interval would, of course, require to vary from forty-eight hours in the acute maniac to a fortnight in the case of the mild mania or melancholia. Quite a sufficient notion of the natural course of the disease might be acquired in that time.

Treatment.—At the end of this period of probation and observation, what should be our course?

We should require to classify our treatment into three divisions; 1st, that which was intended to remedy ascertained disorder of function of the bodily organs other than the nervous system; 2nd, that intended to strengthen or nourish the body generally; and 3rd, that adopted with the view of acting directly on the disordered brain function. It would be desirable to limit our pharmacopœias to 1st, simple purges; 2nd, quinine, iron, alcohol, and strongly concentrated foods given extra to the ordinary diet; 3rd, opium, bromide of potassium, cannabis indica, hyoscyamus, and strychnia. The latter class would require to be given in graduated doses, and their immediate and after effects on the nervous system, on the appetite, nutrition, weight, pulse, and temperature, carefully noted. It might be well to fix the sequence in which the others were to be tried if one failed, and also which was to be tried first in each class, and to arrange for certain periods for the cessation of all medical treatment, in order to watch the case without them. There is no doubt that the class of sedative medicines and the neurotics are those whose ac-

tion in each group of cases most requires study. The most strict and absolute rules would require to be framed for their administration, so far as possible to get true results. Those methods of giving them in each class most generally agreed on (if it is possible to secure anything like agreement) as likely to be beneficial, would, of course, be tried first; for instance, in mild melancholia without delusions, opium in grain doses thrice a day might be tried, as it has a considerable reputation, and no doubt it would soon be determined whether this reputation was deserved, or whether, as in the six cases to whom I have given it on the above plan, its effects are in the very opposite direction to health, the patients beginning to lose weight whenever the medicine was begun, and ceasing to do so when it was stopped. I merely adduce this as an instance.

Objections.—I am painfully conscious of the objections that may be urged to my whole plan, and to everything like it.

1. It may be said "that by this plan we are beginning at the wrong end of the subject; that we should first learn what insanity is, and then study its proper treatment, that as long as its pathology is unknown, its therapeutics must be unsatisfactory." I answer that we are so long in finding out its pathology, that we cannot afford to wait, and that the proper treatment of many diseases was discovered long before their pathology.

2. "This method is thoroughly empirical." It is empirical unquestionably; but it is empiricism of the best kind, rational, tentative, and scientific in its method. All methods of treating insanity *must* be empirical until we know infinitely more than we do at present of the nature of nerve force, and of the normal state of nerve structure. We have to treat our patients now empirically enough in all conscience. Why should we not all systematize our empiricism for a time?

3. "There is no perfect system of classification by which we could arrange our cases in natural groups, with real affinities to each other, so that we should be liable to treat in the same way cases that have no connection whatever, and thereby come to erroneous conclusions." This objection is a very strong one. I can only say that we must do our best to find out the natural classes under which our cases may be placed, and consult together as to what classes we can all agree upon, and treat *those* meantime, till our knowledge is advanced.

4. "Supposing a perfect system of classification to be

discovered, yet no two individual cases will be alike." Are any two cases of ague exactly alike? And yet we treat them all with quinine. I am quite aware that two cases suffering from the same lesion of the nerve centres will sometimes exhibit different symptoms, and that this diversity of the neuroses seems to be almost infinite, but if the essential nature of the disease in the two cases is the same, I think we should be justified in treating them alike, though their symptoms varied considerably. It might be as well said that the infinite variety of face and features, of temperament and character, in which nature delights, requires an equally infinite pharmacopœia.

5. "No two physicians will interpret any classification in the same way." I am quite sure they won't; and, therefore, the necessity for our *united* action, that we may learn to mean the same thing when we use the same terms.

6. "The natural history of the various forms of insanity is not sufficiently known, so that we should be liable to confound the effects of our medicines with the changes that occur in the ordinary course of every case." This objection can only be seriously made by anyone who proposes to study minutely from their beginning to their end in some such way as I have indicated all the forms of insanity without any treatment whatever. To such a one I have not a word to say, except that when his labours are completed, they will be of the most essential service to us, who propose to treat our patients, enabling us to make "our corrections" as the navigators do when they want to find out the exact time of day at Greenwich.

7. "We get patients in different stages of their complaints, so that we could not begin at the same point in each case, and treatment that might be suitable for the beginning of a malady would be quite inexpedient after it had advanced, and would not have at all the same result." As it is quite clear that this objection only applies when a case has essentially changed its character, it is not so strong as it seems. In the plan I have proposed, due note is taken of the duration of the disease, and in coming to conclusions from our data we shall make due allowance for the stage in which each case was first seen.

8. "We can't forget what we have learned, and we must conscientiously put in practice what our experience has taught us to be beneficial." I think the infinite variety of opinion among conscientious, able, and experienced physicians, should

make us most chary of dogmatizing about what we have learned by experience. The experience of any one man is slight, indeed, compared with the vast extent and variety of brain diseases. Which of us does not meet with something beyond our previous experience every week? There must be something wrong about trusting individual experience when we are so far back still in definite knowledge in regard to our subject. Why not try for a time now and forget experience, and begin *de novo*, or at all events endeavour to combine our experience in a systematic way with that of others?

9. "This plan is far too chimerical and *doctrinaire*; it won't suit us practical men, and it suggests too strongly that our patients are to be regarded in the light of mere *corpora vilia* for us to experiment on." If it is too theoretical, by all means try and make it practical. The object is a most practical one, and as for any notions about experimenting on our patients, it is surely a sentimental objection not worthy of being entertained in sight of the great boon to humanity, which any advance in the treatment of insanity would prove to be.

10. The last, and by no means the most inconsiderable objection will be "that we have no time to do all this, that our book-keeping and building, our multifarious superintendence of servants and stewards, our distraction of mind from theatricals and water closets, is such that we cannot devote attention enough to carry out such a scheme of treating our patients." Then I say if that is the case, by all means let us neglect some of those things, and allow our patients a fair share of our time and mind. Surely we have been long enough organizing and beautifying our *asylums*. It is the *patients* turn for an innings now. We have heard of nothing for twenty years in asylums but bricks and mortar, ornamentation and recreation; it is surely now time to fall back on our almost forgotten employment as doctors.

The uninitiated public certainly think we treat our patients medically to some good purpose. Why not justify their confidence by doing so in a systematic way? Surely it is no mean ambition that we should all try and raise our department of medicine up to the level of its other branches in scientific progress. And if we could succeed in placing the treatment of insanity ahead of all other branches of our art, resting it on a sure basis of carefully observed fact and irrefutable generalization, this would be a noble reward for much hard work and self-denying drudgery.