

this ceases the piece is imbedded in the microtom of Gudden and cut under water and stained according to appropriate methods.

The removal of the bichromate from the hardened piece is accelerated by using the water slightly warmed, and to this end the jar or vessel containing the piece may be placed in a warm place, *e.g.*, near a stove.

Should we desire to stain the myeline fibres as well as the cells and axis cylinders we shall have need to employ a combined or mixed method. The hardened piece is now embedded directly in the microtome of Gudden and cut into sections. Of the sections thus obtained we put aside a certain number for treatment by the method to be described later—for staining myeline fibres. The others, in which the cells and axis cylinders are to be coloured, are placed in distilled water, where they get rid of their excess of chrome salt. They are then stained with carmine or aniline, etc. The reason for this procedure is that the chrome salt is necessary to fix the colouring matter employed to stain the myeline fibres, whilst on the other hand cells and axis cylinders, which are strongly impregnated with chrome salts, will not take carmine and aniline dyes. We have therefore to keep the chrome salt in the one instance and to get rid of it in the other.

The preliminary preparation of *pieces* whose sections are to be stained for myeline fibres only is as follows:—The piece is placed in alcohol 70%, and left there for a certain time; it is then imbedded in celloidin, and subsequently undergoes a special treatment to be described further on. Special microtomes, not that of Gudden, are employed to cut these sections.

Accordingly we may proceed according to three methods:—

a. We may cut with the microtome of Gudden and stain the sections for cells and axis cylinders only.

b. We may cut with the microtome of Gudden and treat the sections obtained in two ways—1st, for axis cylinders and cells as above, 2nd, for myeline fibres by a modified Weigert process.

c. We may adopt from the first a special method of cutting sections and of staining in order to demonstrate the myeline fibres—method of Weigert and of Pal.

(*To be continued.*)

PART IV.—NOTES AND NEWS.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

The quarterly meeting of the Association was held at Brislington House, Bristol, on Friday, May 1st, at 3 p.m. The chair was taken by Dr. Yellowlees (the President), and among those present were:—Dr. Hack Tuke, Dr. Fletcher Beach, Dr. Thos. Webster, Dr. E. Markham Skerritt, Dr. Geo. H. Savage, Dr. David Nicolson, Dr. Charles S. Wigan, Dr. J. H. Paul, Dr. E. B. Whitcombe, Dr. E. Percy Smith, Dr. Samuel Craddock, Dr. T. Outterson Wood, Dr. T. Seymour Tuke, Dr. H. T. Pringle, Dr. Ernest W. White, Dr. A. Law Wade, Dr. A. C. Suffern, Dr. L. A. Weatherly, Dr. John Ewens, Dr. Augustin Prichard, Dr. J. Michell Clarke, Dr. Vincent Milner, Dr. Samuel Smith, Dr. Harry A. Benham, Dr. E. Shingleton Smith, Dr. F. G. Heyman, Dr. Wm. A. Moynan, Dr. H. Rayner, Dr. M. J. Nolan, Dr. Charles H. Fox, Dr. Bonville B. Fox, Dr. W. J. Fyffe, Dr. J. Hannecke Wathen.

The PRESIDENT—I think we must proceed to business, and happily for ourselves and our visitors the business shall be very brief. The first part is pleasant; it relates to the next annual meeting, and the Council have fixed the date of that meeting for the 23rd July, and the place of meeting will be

Birmingham (hear, hear), our President there being Dr. Whitcombe. The next matter is the election of new members. (Hear.) I have not troubled you with the minutes of the last meeting because they are in the Journal; therefore we now come to the election of new members, and there are before us seven names, namely, Dr. James Henry Earls, of Fairholme, Weybridge; Mr. William Harris Heygate, of Cranmere, Cosham, Hants; Mr. Archibald Robertson Douglas, Assistant-Medical Officer at the East Biding Asylum, Beverley; Mr. George M. P. Braine-Hartnell, Senior Assistant-Medical Officer, County and City Asylum, Powick, Worcester; Dr. W. Gordon Sanders, Pathological Assistant-Medical Officer County Asylum, Rainhill; Mr. T. E. K. Stansfield, Junior Assistant-Medical Officer and Pathologist, Banstead Asylum, Sutton, Surrey; and Dr. Charles A. Mercier, Lecturer on Insanity, Westminster Hospital. These gentlemen, seven in all, are duly certified by members of the Association, and the recommendation is concurred in as required by two other members, and the ballot-box will now go round. According to our habit we will ballot for the seven names, and if there are any "Noes" we ballot again.

The Hon. General Secretary (Dr. Fletcher Beach) took the ballot, and after scrutiny,

The PRESIDENT said—I have now to announce that these seven gentlemen are all elected members of the Association. The next matter is an announcement on behalf of Dr. Benham, that he will be glad to see any members to look over the Stapleton Asylum to-morrow. I have not been there for many years, but I know it was quite worth seeing when I was there, and I am sure it is now. When we decided to come to Bristol, Dr. Hack Tuke was kind enough to say that he would read a paper on Prichard and Symonds, and I have now great pleasure in calling upon him to read a paper on "Prichard and Symonds in Especial Relation to Mental Science." (See Original Articles.)

After the reading of the paper, Dr. Tuke handed round a framed portrait of Dr. Prichard, and a photograph of Dr. Symonds.

The PRESIDENT—I am sure we are all very greatly indebted to Dr. Tuke for this most interesting paper, all the more interesting because it has so much in it that is personal as well as professional. I shall be glad to hear any remarks, not necessarily confined to the subjects of the paper, but dealing with the great doctrine which Prichard advocated and Symonds approved. I can hardly expect you to add to the tribute that has been paid to the memory of these men by the reader of the paper, and so worthily paid.

Dr. NICOLSON (Broadmoor)—Personally I feel that I owe a debt of thanks to Dr. Tuke for his interesting paper, and I am sure that all the members of the Association and the visitors, the members of the local branches of the profession who have honoured us by coming here to-day, will feel that we have every reason to be grateful, not only for Dr. Tuke's reading a paper, but for his taking up the careers of two physicians whose names are household words to us (hear, hear), who live very much in the memory of Bristol people. Moreover, they will carry weight for anything that they have ever said upon the speciality to which we belong. I can hardly imagine a subject more in accordance with Dr. Hack Tuke's sympathies than that which he has put before us this afternoon. After the admirable luncheon at which we have been entertained, I thought that any paper must be torpid and heavy (laughter), but my anticipation has not been realized. (Hear, hear.) The question of moral insanity which Dr. Prichard foresaw so clearly and defended so strongly is one in regard to which we are only now seeing the practical results arising from what were in his time more or less matters of theory. And it is the more to the credit of one who lived in those, what we may call darker days of superstitious notions about things, to have evolved this and brought it into the clear daylight of science, so that in our day it should be capable of bearing good fruit, as it undoubtedly does. Having been 25 years connected with criminals at all angles, I suppose I may claim some kind of right to say something on this subject. (Hear.) Moral insanity is a subject that can, no doubt, be made too much of, like everything

else, and in individual cases we have to be careful not to let our feelings carry us away, otherwise a most objectionable result will come of it. If we were to screen a man whose mere moral obliquity had brought him to a court of law, if we were to allow the term to be too influential in our minds, we would be thwarting justice and cutting our own throats as men who were endeavouring to carry out scientific ideas; so that instead of carrying weight in the courts of law we would be laughed at. With that caution I think we may very safely allow ourselves to accept it as a fact that there is such a condition of mind as may be rightly and properly described as "moral insanity." But then we must be careful not to allow this term to be a stepping-stone to the criminal to evade justice. It being a term which is less acceptable than some others to the legal minds on the Bench, we must be very careful not to make it a convenience in our difficult cases, when we have to give an opinion in cases where the individual has committed a criminal act. I can only say from my own experience in prisons that we have it very largely demonstrated that there may be cases of insanity in which the intellectual faculties are not involved; and a very brief experience amongst convicts and amongst prisoners will satisfy anyone who turns his mind to the subject that such and such an individual is perfectly capable of reckoning up the value of his conduct, but that he is unable, whether under measures of repression or under measures of the utmost possible kindness, to conduct himself as he knows he ought to; so that there can be no question about the existence of a condition of the moral sense which has to be borne in mind in dealing with individuals at this angle: and the fact is now universally observed and given attention to in all regulations in regard to convicts, that certain individuals are unable to behave themselves in the face either of whipping or kindness; and this consideration has compelled the authorities, even against their own will, to introduce measures of leniency in certain instances where they find that the ordinary penal discipline fails to take effect. These cases are very numerous, and have largely compelled our prison authorities to modify the old—what is now called hard—treatment towards those who come under their sway, so that that may be taken as a practical outcome of Dr. Prichard's life and work. And I think we may point to that distinctly as one of the ultimate and present outcomes of the grave and responsible work he initiated. When we come to moral insanity in relation to such a case as murder we all know that the attachments, the emotions, and affections generally must be considered before we can say whether the insanity is such as would warrant the reprieve of a man from punishment. I am extremely reluctant to say that, in any cases, we are able to admit it. We have to get an amount of cumulative evidence, not only with regard to his relations to the individual killed, but also as to his impressions at the time, and his antecedents, so that unless we have some other evidence we scarcely are able to point to merely moral conditions, or rather the absence of moral conditions, as sufficient grounds for saying, "You are doing wrong if you inflict any degree or measure of punishment upon that individual." And I think there are instances in which, although we have moral insanity or grave moral obliquity, we are not able to avoid inflicting some kind of punishment just as you would punish a child that had done some moral wrong or had committed some offence, although you would not punish it by death. I ask you, Mr. President, to allow me to convey to Dr. Hack Tuke the thanks of this meeting for his extremely interesting and able paper. (Applause.)

Dr. SAVAGE—My professional paths have led me to an experience of criminality as well as insanity. Now one has to recognize that the moral and the intellectual grade one into the other; that one sees cases in which there is a very slight, almost imperceptible, intellectual perversion and very great moral perversion—however difficult it may be to meet with absolutely pure cases of moral insanity. We see certain individuals who do not grow up into moral manhood, and on the other hand one sees many degenerate through insanity into moral weakness. One

feels that one may have too much of a good thing, and I must say that some of the anthropologists, and criminal anthropologists of Italy, are going very far indeed. A reviewer recently wrote: "It seems to me that in the next generation we shall hang at sight." (Laughter.) That is, we shall hang on such and such a face at once and there will be no further evidence. We shall then agree that a certain formation of head, chin, or nose implies "that man must be bad." Some of us who have had experience with the foreigner from Central Europe, in America, know that he was willing to place his hand upon you or me and say "Forger," and of course he was able to say "If you live long enough you will become so." (Laughter.) Joking apart we have the fact that there are certain cases in which moral insanity is detected, and where intellectual insanity cannot be detected at all. One would, however, hesitate to accept the moral insanity that could be detected by either the reflexes, or the shape of the head, or any one physical characteristic. In nearly all these cases it is a question of cumulative evidence, and there is no doubt that the chronic lunatic and the true criminal do approach one another very much indeed in the type of face and body. I can only add that one feels particular pleasure in hearing this paper at the scene of the work of these eminent men. We, all of us, feel much pleasure in coming here, and still greater pleasure in having heard such an interesting paper; and I trust that some of our local friends and brother members will contribute something to the subject.

The PRESIDENT—There is Dr. Prichard's son among us. (Applause.) For his father's sake as well as his own we would like to hear his voice. (Hear, hear.)

Dr. PRICHARD, who was received with applause, said—Mr. President, I feel, with others, very much obliged to Dr. Tuke for the paper he has read, but I am entirely unqualified to discuss this matter. My lines of life have been entirely different from that in which you are employed and in which my father was employed, and I really should not be able to discuss with any of you the question of moral insanity, firmly as I am convinced of the existence of such a disease. I rise as you have asked me to do so. I felt very much pleasure in listening to Dr. Tuke's paper, and feel very much obliged to Dr. Bonville Fox for asking me to come to this very pleasant meeting. (Applause.)

The PRESIDENT—With regard to moral insanity it has always seemed to me that the most significant proof of its real nature, the proof that it is disease and not mere depravity, is found in the subsequent history of the cases. If you watch the progress of confirmed cases you find in the course of years that they gradually deteriorate and eventually sink into dementia. I have in my mind several cases in which moral perversion was for long periods the only sign of the brain degeneration in which they terminated. I should like to ask Dr. Nicolson whether this accords with his large experience.

Dr. NICOLSON—I am a little bit handicapped in having to deal with such a question on the spur of the moment, but I will say that a great many of the convicts, whose acquaintance I made twenty years ago, and who used to be sent from prison to prison—I mean men who were not insane enough to be moved to an asylum, but who were unable to be dealt with under the ordinary prison rules—we all remember the cases of men unable to bear the prison discipline, and I can say that these men—a number of these men—we now have in asylums who have come there, not through the prisons, but by direct transmission from social conditions to asylum life. And I have a strong feeling, especially in recent years when there is a cry about the diminution of crime, or in the number of criminal occupants of prisons, that at the same time we find that our asylums are becoming more largely populated. I am quite sure that there is a considerable element of that explainable on this footing—that men formerly dealt with purely on the criminal footing subsequently become so insane that they are placed in asylums and become chronic demented, and thereby diminish day by day the number of prison occupants. I think this is well worth working out; as the important question of early diagnosis

of insanity will show one of the reasons why the number of prisoners is diminished. Of course there are the training ships and schools for street arabs and individuals of that class, and these tend to relieve prisons of a certain proportion of inmates, as well as a great many other philanthropic schemes. The Discharged Prisoners' Aid Society is also an element in the matter. But after all I think it will very likely be found—the relative proportion being in the inverse ratio that the fewer we have in prisons the more we have in asylums—that these will be observed to be explainable in relation to each other. Of course I am only giving what is my own impression; yet there is a good deal in the facts that asylum life is very different from what it used to be, that relations are more willing to allow their afflicted to be placed in asylums because they are satisfied that asylums are doing what they can for them, and they know that they are better off than they could be at home: and domestic life is so strained now that they could not be bothered with them. I think, Mr. President, that the suggestion you make, so far as I am able to express an opinion, is perfectly correct, and would be proved on the question being investigated. (Applause.)

The PRESIDENT—That is a very interesting answer, and I am glad it was elicited. It confirms the opinion that many cases begin in purely moral insanity, undergo gradual degeneration and sink into dementia ultimately, thus affording the best possible proof that the moral perversion into which they first fell was truly the beginning of the insanity. Very seldom do we meet a case which we can call pure moral insanity. I had one the other day, one of the purest cases I ever met. A man and wife came together to see me, and the man implored me to take care of him because he had a dreadful and unaccountable impulse to kill his wife. They were quite comfortable and happy in their daily life; nothing ailed him so far as he knew. He had no delusion of any kind whatever, but he had this horrible feeling impelling him to kill the wife whom he dearly loved. He is now with me as a voluntary patient, and he does not wish to leave until he gets rid of that feeling. Dr. Nicolson spoke of the perplexity and difficulty of dealing with these moral lunatics, and said you must measure to them some sort of punishment or retribution to mark your sense of the wrongness and your desire to right it. That is to me a most significant confirmation of the wisdom of gradations of punishment according to the mental condition in each case, which I believe to be the only medium course between no hanging at all and the terrible doctrine of hanging at sight, which some one anticipates as a revulsion from undue leniency. (Hear, hear.) Dr. Tuke, we thank you for your paper, and for bringing before us the lives of two such remarkable men as Prichard and Symonds. (Applause.)

Dr. HACK TUKE, in reply, said—I have to thank you for the kind way in which you listened to my paper. I confess I expected when I saw those comfortable couches and easy chairs to see you all fast asleep. (Laughter.) I am glad that this was not altogether the case. I had just finished writing my paper when I received a letter from Dr. Herbert Major, who says he has been consulted about a girl of 14, and goes on to mention a number of defects and delinquencies which indicate moral disease, and then he says, "I am unable to detect any intellectual defect whatever. The child is intelligent, assiduous, and plodding as to lessons, and well behaved in every other way." Now, whether that child becomes in the course of 10 or 20 years a dement does not affect her present condition in the eye of the law should she commit a crime. And therefore if, as the President says, the subsequent condition is a degeneration of the former moral insanity, it does not in the least detract from the position taken by Prichard. It does not affect the question in the eye of the law, because no judge or jury can decide what is to happen 10 or 20 years hence. (Hear, hear.)

Dr. LIONEL WEATHERLY read a paper on "The Use and Abuse of Hyosocine." (See Original Articles.)

The PRESIDENT—We shall be very glad to hear any remarks on this very

practical paper. Not a few gentlemen here have used hyoscine, and it is worth while to let us know something about it.

Dr. PRECY SMITH—I have very little to say about hyoscine. I have used it, of course, for ordinary cases of acute mania, and I cannot say that my results have been so good as those Dr. Weatherly has obtained. I have not found cases in which one or two doses have been given and there has been rapid recovery. My experience is that one has had to go on for some time, as with other drugs, and the effect has been slower than in the experience of the reader of the paper. Then, with regard to the dose, of course one has to begin with small doses, the two-hundredth of a grain given hypodermically, and increase it up to a seventy-fifth or a sixtieth or so, but I do not think I have ever given a larger dose than that, and then one has had to give it two or three times a day. With regard to sleep, Dr. Weatherly said it did not produce ordinary sleep—a profound sleep, and then a less profound sleep—and that has been my experience. I cannot say that I have seen serious effects from hyoscine, but from hyoscymine there have been serious effects. I suppose there are some patients, however, so susceptible that a two-hundredth of a grain would produce collapse.

Dr. SAVAGE—This being a practical paper, I venture to make a few remarks on the unfavourable side. I know of a case where a two-hundredth of a grain had a fatal effect. The patient was a woman who was extremely maniacal—a woman of 45 or 46—who would have been moved at once to an asylum, and it was a question how to pass the few hours of the night, and it was suggested that there should be artificial food, and that then the two-hundredth of a grain of hyoscine should be given, as there was great difficulty in getting her to take the food. The woman seemed to be sleeping satisfactorily, but from that sleep she never roused. One has seen cases in which a small dose in anæmic or hysterical cases has been injurious—cases in which they have passed rapidly into a stuporous condition. In alcoholic cases one has used it with success, but the cases in which I should use it by preference would be cases of folie circulaire and of recurring maniacal excitement. I have seen no good results following from its use in melancholia.

Dr. NICOLSON—Of course one fatal case makes a great impression. In our maniacal cases at Broadmoor, when hyoscine has been used, it has generally been a hundredth to the seventy-fifth of a grain that has been injected, and it has been beneficial. We do not use hyoscine or any other hypnotic largely, but very carefully, and my experience and that of my colleagues has been that hyoscine is attended with benefit, and has given a quiet night to those who, I am quite sure, would have been outrageously noisy during the whole of it.

Dr. LAW WADE—My experience is decidedly against the hypodermic use of the drug at all. The result has been a state of stupor, and afterwards the patient has been as bad as ever. In cases in which there have been definite general paralysis, chronic restless mania and delirium, advantages may be found by giving it by the mouth. A patient was a long time with me as a quiet, weak-minded man, so that the Guardians were always pressing me to discharge him. I did so very much against my wish, and he returned noisy, dirty, and troublesome. To that man I have given the drug by the mouth, and he is quiet and goes to work in the ordinary way. But hypodermically I have seen no good effect. The patient is knocked down, and there he lies, but as soon as he recovers he is as bad as ever.

Dr. WEATHERLY, replying to the discussion, said—I meant that the drug should be used in distinct and suitable cases of irritability, and in such cases hyoscine seems to tide a patient over that period. I am glad that Dr. Smith bears me out in the opinion that this drug is not so dangerous as hyoscymine. I protested against the abuse of hyoscine, but if it is properly used I do maintain that it is a very valuable drug; and in cases of hysteria it is almost invaluable. I have found in cases of melancholia that it has no effect at all, and as a rule it produces a very great feeling of fatigue. Dr. Nicolson again seems to

bear me out in my opinion that it is a very useful drug in many cases of excitement and mania.

Dr. BONVILLE FOX read a paper entitled "Notes on a Few Unusual Cases of General Paralysis." (See Clinical Cases.)

The PRESIDENT—I am sure we thank Dr. Fox very much for his valuable paper, and for the admirable record of interesting cases. (Applause.)

Dr. WHITCOMBE—Mr. President, the first case in Dr. Fox's paper recalled to my mind one which I had in the asylum many years ago, in which the patient, a commercial traveller, with a history of drink, came with all the physical and mental symptoms of general paralysis. He went into the stage of complete paralysis, and from that condition he made to all intents and purposes a perfect recovery—such a recovery that he went out and took a situation again as a traveller at the rate of £300 a year, and after he had held it for some eighteen months he returned to the asylum and died in a very short time from general paralysis. I was not a little interested to hear Dr. Fox's treatment of the convulsions in general paralysis, and I must say I have found considerable benefit from hyoscine, probably a better effect than I have found from bromide and chloral. With regard to remarkable recoveries, I should just like to refer to two cases in my experience. The first case was that of a man admitted to Bethlem in 1885. Dr. Savage will remember him perfectly well. He was the captain of a steamer, and came in with a maniacal attack. After a few months of this excitement, with exaltation, he quieted down, and seemed perfectly to recover. There was no tremor left, and there were no physical signs which would make one diagnose paralysis, although it was suspected. He went to sea again, and for 18 months commanded a ship, and the only difference noticed in him was that from having been an extremely arbitrary man, who used extremely bad language to his crew, he had become much more placid and complaisant. Then he returned to England, and rapidly broke down. He became demented, had extreme tremor, and in the course of two months died from epileptiform convulsions. That was a case in which a man apparently recovered, and was able for a period to perform complicated duties. The other case was that of a man admitted at the end of 1884 to Bethlem, and he was supposed to have general paralysis. He had some maniacal excitement, and great inequality of the pupils. There was some blurring of speech and some alteration of handwriting—missing words and letters—and the knee reflexes were affected. Early in 1885 he had serious convulsions, accompanied by temporary loss of power on the left side. But the curious thing was that after the occurrence of these convulsions he improved mentally very much, and he became apparently perfectly well. Then it was pointed out to him that he had probably got a disease which would progress, and it was a serious thing to think of returning to active work, and so he consented to remain as a voluntary boarder, and so he remained until a few weeks ago—over five years. Then he became excitable, his handwriting altered, he left out words and letters, and one has very little doubt that he has reached the final stage. He is occasionally wet, and restless, and unmanageable; tumbles about, and has exalted ideas and schemes for producing great wealth. That seems to be an extremely interesting case considering the question which has been raised of trephining for general paralysis. Here was a case which would seem suited for trephining, but these symptoms all passed off without anything of the sort being done, and one does not see that anything would have been gained by trephining in a case of that kind, although it would have got the credit. (Hear, hear.)

Dr. RAYNER—I, like others, have been much interested by Dr. Fox's paper, and that particular point of the patient's apparent recovery, or actual recovery, is especially interesting to all of us. And I suppose that we have all seen such cases. One of the most striking cases in my own experience was that of a man with well-marked symptoms of general paralysis, which went on for nearly two years, and he very nearly died from general convulsions. Indeed, I thought he would have died within a few days, but, however, after a time he steadily

improved, and got quite well as far as I could see, though I kept him for a long time in the asylum, because there were reasons why I should not discharge him prematurely. He remained three years, and then he went abroad to entirely new conditions of life, and when I heard of him two years ago he was doing perfectly well in his new condition. Whether he has broken down or not since I do not know, but that was about the most striking recovery I have seen. I remember the case of a medical man with marked symptoms of paralysis. He had taken alcohol and all sorts of drugs, and he had very well marked symptoms of general paralysis, but gradually they passed away, and he was discharged. I saw him two or three years afterwards, still following his occupation as a dispenser. The traumatic cases interested me, because I remember especially two of general paralysis developing after blows on the head. One was a man in the dockyards, with a blow on the head, and another was a butler, who fell downstairs and knocked his head. Both of these immediately developed general paralysis. It seemed to me that in both the blow was merely the exciting cause of a predisposition which already existed. At first I did not think that that was the case, but when I came thoroughly to get at the histories of the actual lives of the men, I found there really was sufficient predisposition. But then one has seen other cases of general paralysis following injuries generally more severe than those I have quoted, in which general paralysis had developed. One case I remember specially in which a man had well-marked symptoms. They passed away after some time, but he never recovered. I believe he remains insane to this day, but with no symptoms of paralysis. With regard to treatment, we know it has been said that if we contrived to give general paralytics compound fractures of both legs in the early stages they would probably get well. (Laughter.) Of course, one cannot adopt that treatment, but acting on this idea, and thinking one might get some good by imitating it, I have tried extensive blistering of the legs, thighs, and sides, and I must say that the effects of the treatment were not satisfactory. (Hear, hear). Indeed, the cases were decidedly worse. (Hear.)

Dr. WHITE—I have at the present time a case of general paralysis with three carbuncles, and that man is improving. He has been with me for three years; two years ago he improved, and went out to work. He developed these carbuncles, and I expected him to die, but he is now getting better. I had a case that finally terminated in Bethlem, and will be known probably to Dr. Savage, and also Dr. Smith—Mr. H—. He was the son of a well-known artist. He came from Broadstairs, and I diagnosed that he was a general paralytic at the very early stage, and I made a report that I thought he would die in three or four years, to his brother-in-law. At first he could talk perfectly rationally on most subjects, but he certainly was emotional, and once or twice broke down in tears. Then he was very threatening to his brother-in-law, and they packed him off to us, and we kept him. He got quite rational, and was discharged. Then he gave a tremendous amount of trouble in London. He was guilty of all sorts of habits of immorality, and he had finally to be sent to Bethlem, where he died some two or three years ago. Undoubtedly he had been going downhill for some time before he came to us, and yet he got quite well and was discharged. But he broke down again.

Dr. SAVAGE—To continue that case, I may say that it was certainly one of the most difficult cases I have had to deal with. He insisted upon having visits from the Commissioners, and he got them. They were very much inclined to discharge him, but I quite agreed with the opinion of Dr. White, and I said, "If you discharge him you discharge a general paralytic." His friends came to see him, and they threatened proceedings against me, and I had a good deal of abuse from others who were not personally interested in him. At our entertainments he generally took a particularly paralytic position, and everybody asked who that handsome man was. (Laughter.) There is one case I remember in which a man had passed through all the early stages into the stage with epileptic fits, and he was so bad that his friends were sitting up to await his

death. There were three or four bags of pus about his body, and it was just a question whether to let him die as he was or to evacuate these abscesses. I decided to evacuate them, and then he improved, and instead of dying passed into a quiet, weak-minded condition—well, not so very weak-minded—and he has remained in that condition since 1884, and two or three times lately he has challenged me to play lawn tennis with him.

The PRESIDENT—This very interesting paper is full of subjects for discussion had there been time for it. I am inclined to think that in the traumatic cases mentioned the disease really existed previously, and the blow merely developed it. With regard to the apparent recovery from general paralysis, I think that many alcoholic cases wonderfully resemble general paralysis, and I suspect that some of those recoveries are in cases of alcoholic origin. General paralysis may develop in the course of another insanity. That is a statement which may probably be received with a good deal of doubt; but I believe I have seen that. It would be interesting to know what the experience of the meeting is, but it is too late now to enter on the question. Some one mentioned *trephining* in general paralysis. I am disposed to think it one of the most unjustifiable developments of brain surgery that we have yet heard of. (Hear, hear.) We all thank you, Dr. Fox, for your very suggestive paper. Before we separate, let me say that those who have not looked into Brislington House ought certainly to do so. It is a most interesting monument of what was done in the early days of the century, when the treatment of the insane was very different from what it is now. (Applause.) The beautiful grounds and the villas you may take for granted, but in the old house you will look with much interest at the kindly and thoughtful provision which was made for the treatment of the insane in years long gone by. (Applause.)

The meeting then terminated.

Members dined together at the Royal Hotel, Bristol, in the evening, under the presidency of Dr. Yellowlees.

THE MEDICO-PSYCHOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.

A Quarterly Meeting of this Association was held in the Hall of the Royal College of Physicians, Edinburgh, on 12th March, 1891. Dr. Keiller was called to the chair, in the absence of the President.

The SECRETARY (Dr. Urquhart) read the minutes of the previous meeting, which were approved, and signed by the Chairman.

ELECTION OF NEW MEMBERS.

The meeting unanimously elected the following as members of the Association:—John Bruce, M.B., C.M.Ed., Asst. Med. Off. Crichton Royal Institution, Dumfries; Herbert W. Greatbatch, M.B., C.M.Ed., Jun. Asst. Med. Off. Montrose Royal Asylum; John G. Havelock, M.B., C.M.Ed., Sen. Asst. Med. Off. Montrose Royal Asylum.

THE IMPAIRMENT OF THE ARITHMETICAL FACULTY IN INSANITY.

Dr. IRELAND then read a paper on "The Impairment of the Arithmetical Faculty in Insanity" (see Original Articles).

Dr. SHUTTLEWORTH said that, had he known sooner of Dr. Ireland's paper, he would have come better provided with facts and figures which might have had some bearing upon the subject. He had sent home for one of the reports of the Institution of which he was the medical officer (the Royal Albert Asylum), where they had 580 imbecile children; and in an appendix to that report there were statistics which would bear out to some extent the views of Dr. Ireland as to the marked deficiency in arithmetical power of that class of patients