

Dr. BENHAM said he had great pleasure in seconding. What Dr. Macdonald referred to as the Worcester Amendment was placed before his committee, and, he was glad to say, obtained its unanimous assent.

Dr. BOWER said that when this question was brought up at the Three Counties' Asylum Committee, of which he was a member, the difference of opinion which appeared among the medical superintendents was enlarged upon to such an extent that they simply allowed the Worcester communication to lie on the table, and did nothing at all one way or the other. He thought it was most important that this sub-committee should be appointed to consider the question; but he was not quite sure whether they ought not to report and do something before the next meeting of the Division, which was not till April, in order that the views of that Division, as of the Association generally, should be put into the hands of the Lord Chancellor before he revised the Bill, which he was certain to put down for the next session.

Dr. STEWART asked whether Dr. Deas would agree to tack on to his resolution something to the effect that the Division recognised the great importance, for the benefit of the public who were treated in asylums, that a clause should be introduced into the Lunacy Bill for the purpose of granting pensions compulsorily to the medical officers and others.

Dr. DEAS said he was quite willing to adopt the suggestion made by Dr. Stewart.

Dr. MACDONALD said he did not wish to throw cold water on the suggestion of Dr. Stewart, but the rules of the Association would not allow them to do what he advocated. They had no power to pass a definite resolution of any kind like the one he had outlined. They might pass a resolution to work up anything in their own district and report to themselves, but not to hand over anything to the public as coming from their Association. That must come from the general body.

The resolution of Dr. Deas as originally moved—"That a small committee be appointed to consider the question of compulsory pensions and report at the next meeting"—was then put and carried unanimously, a committee being straightway formed, on the motion of Dr. DEAS, seconded by Dr. SOUTER, consisting of Drs. Benham, Macdonald, Wade, and Deas.

#### THE NEXT MEETING.

The suggestion of the committee that the next meeting be held either in Oxford or Cardiff was adopted, after some discussion, the date being fixed for 19 April, 1898.

#### THE NURSING REGULATIONS.

The consideration of these was postponed until the next meeting.

#### LETTERS OF APOLOGY.

Dr. MACDONALD said he had received a letter from the President of the Association, Dr. McDowall, regretting his inability to be present. He had also one from Dr. Weatherly, who had been suddenly prevented from attending; and one from Dr. Goodall, who was to have read a paper to them, but who had to stay at home in consequence of illness among his patients.

#### THANKS TO DR. FOX.

This being the close of the business of the meeting, the CHAIRMAN conveyed the warm thanks of the members of the Division to Dr. Fox for the kind and hospitable way in which he had received them.

On the motion of Dr. DEAS a vote of thanks was passed to the chairman for presiding, and the proceedings terminated.

The members afterwards dined together at the Royal Hotel, and a most pleasant evening was spent.

#### SCOTTISH DIVISION.

A meeting of the Scottish Division was held in the Laboratory of the Scottish Asylums, 12, Bristo Place, Edinburgh, on Thursday, November 11.

Present: Dr. Urquhart (in the chair), Dr. Lewis C. Bruce, Dr. Carswell, Dr. Campbell Clark, Dr. Clouston, Dr. France, Dr. Gilmour, Dr. Hotchkis, Dr. Ireland, Dr. Carlyle Johnstone, Dr. Macpherson, Dr. Middlemass, Dr. R. B. Mitchell, Dr. Oswald, Dr. Richard, Dr. Ford Robertson, Dr. G. M. Robertson, Dr. Turnbull (Secretary), Dr. N. P. Watt, Dr. Watson, Dr. Yellowlees; with Dr. Christie, Dr. Findlay, and Dr. Orr as guests.

#### ELECTION OF NEW MEMBERS.

Dr. Charles A. Bois, Hartwood, proposed by Drs. Campbell Clark, Beadla and Turnbull; and Dr. William Cotton, Bishopston, Bristol, proposed by Drs. R. B. Mitchell, Clouston, and Turnbull, were declared duly elected members of the Association.

#### THE NEW LABORATORY.

Dr. CLOUSTON said that the reason why they met there that afternoon was that their laboratory was now in working order. He had made the suggestion to the Secretary, thinking it would be interesting for all of them to see it thoroughly, instead of making a journey from the Physicians' Hall.

The CHAIRMAN said he felt greatly honoured in being called upon to preside on such an auspicious occasion, and thanked Dr. Clouston for the invitation.

#### THE ROSSLYNLEE ASYLUM.

Dr. R. B. MITCHELL showed and described the plans of an addition which is to be made to the Midlothian District Asylum at Rosslynlee.

#### NOTES OF VISITS TO DANISH AND GERMAN INSTITUTIONS.

Dr. IRELAND read part of a paper on his visit to Danish and German institutions for the care and education of the feeble-minded. (See page 45.) The meeting agreed to postpone the discussion of this paper until the next meeting, when Dr. Carswell is expected to address the Division on the subject, with special reference to the Barony Parish of Glasgow.

#### THE USE OF FORMALIN.

Dr. FRANCE showed pathological specimens prepared by the formalin method. He said that formalin was a name applied to a saturated aqueous solution of formic aldehyde, H.C.H.O. It was an oxidisation product of methyl alcohol obtained by passing vapours of the latter mixed with air over the heated surfaces of copper, silver, or platinum. This aqueous solution could not be concentrated beyond 40 per cent. without decomposition. Formalin had the chemical property of converting organic gelatinous and albuminous materials into inert insoluble substances. It was this property that made it so useful a fixing agent in pathological work. Orth was one of the first who, in the *Berliner Klinische Wochenschrift* on March 30, 1896, pointed out its value. He advised a 10 per cent. solution in Müller's fluid. Tores, in the *Centralblatt für Allgemeine Pathologie*, advised a 10 per cent. solution of formalin to which was added Na.Cl. 1 part, Mag. sulphat. 2 parts, and Sod. sulphat. 2 parts. He recommended that the solution should be changed once or twice during two days' immersion. For the last thirteen months he (Dr. France) had used a modification of these methods. It corresponded most nearly to that recommended by Melnikow-Raswedenkow, viz., about 16 per cent. formalin, .1 per cent. of acetate of potash, .075 of nitrate of potash. The proportion of these constituents was not of much importance, as the first specimens immersed destroyed the accurate balance. It was very inadvisable to wash the specimen. He put it in at once, and allowed it to remain from twenty-four to thirty-six hours, according to the bulk of the material that he wished to preserve. For instance, the intestines required certainly not more than twenty-four hours, while the lung and spleen required thirty-six. He had used some formalin for six months without the addition of any fresh, and it worked very well. The specimens were thereafter immersed in a spirit bath of alcohol—80 to 90 per cent.—for from twelve to twenty-four hours. They were then mounted in glycerine and water, in the proportion of 44 parts of the former in 100 of water, and to that was added 3 parts by weight of acetate of

potash, to make it diffuse more rapidly. At first the specimens would not sink, and for that reason he found it much more convenient to stitch them to glass slides as a preliminary measure. In the case of the intestines it was very important to adopt this plan before putting them in the formalin, because the formalin rendered them leathery, and they curled up into various shapes. The advantages of formalin were obvious in preserving the colour of the specimens as they were when removed from the body without distorting their appearance. Besides, they could mount the specimens very rapidly.

Dr. FORD ROBERTSON said that this new method of preserving whole organs, as described by Tores, had been largely used by several pathologists in Edinburgh during the past year. There could be no question as to its great value. Dr. France's modification appeared to be simpler than Tores' process, and this, of course, was an important advantage. The preparations on the table were certainly very beautiful. In the past many valuable pathological specimens had been practically lost owing to the want of a satisfactory method of preserving their natural appearance. This want was now supplied by formalin. The method was one that should be employed in every asylum laboratory. The question had been raised as to whether these preparations were suitable for microscopical examination. He was certain that they were. Formalin had great penetrating power, and at the same time fixed the tissues very rapidly. If a piece of an organ preserved by this method was placed for a fortnight or so in a bichromate solution, it would give a good staining reaction with hæmatoxylin and eosine. In the case of nervous tissues, if a 10 per cent. solution of formalin was used, and allowed to act for several days before the later stages of the process were carried out, a good medullated fibre stain could be obtained by either Heller's or Campbell's method without further preparation, or by Weigert's method after pieces had been placed for some time in a bichromate solution. In his experience, however, tissues hardened in formalin could not be relied upon for the satisfactory study of the chromophile elements of the nerve-cells.

MICROSCOPICAL DEMONSTRATION UPON THE MORBID CHANGES AFFECTING THE  
CORTICAL NERVE-CELLS IN INSANITY.

Dr. W. F. ROBERTSON said that the series of preparations under the microscopes were intended to illustrate some of the more important of the morbid changes which could now be shown to occur in the cortical nerve-cells of the insane. He had nothing that was really new to show, unless the morbid condition seen in one of the preparations from a case of idiocy could be excepted. The brain from this case showed throughout nearly the whole of both hemispheres a narrow band running through the layer of large pyramidal cells, in which the nerve-cells were either quite undeveloped or had only reached the full-time foetal stage. The first six preparations were by the aniline black fresh method of Bevan Lewis. They showed advanced pigmentary degeneration in a case of senile insanity, vacuolation of nuclei and granular degeneration of protoplasm in a case of acute mania, "ghost-cells," or nerve-cells which remained practically unstained by the aniline dye, in a case of senile insanity, paucity of nerve-cells in a case of profound dementia following acute mania, and the imperfectly developed layer in the case of idiocy to which he had just referred. The degenerative changes recognisable by this method were no doubt merely phases of the morbid condition which, as demonstrated by some of the newer staining methods, was termed "chromatolysis." The next five preparations illustrated this condition. Alongside two examples of nerve-cells showing the chromophile elements of the protoplasm in their healthy state were placed sections from cases of early general paralysis, acute mania, and acute melancholia, showing more or less complete disintegration of these elements, as well as pallor, distortion, and displacement of the nucleus. From 5 to 10 per cent. of the nerve-cells could be shown to be thus affected in such cases. He believed

that this change was directly related to the mental disease. He was satisfied that it did not occur in the brains of patients dying in general hospitals, except, of course, in cases in which there had been severe cerebral disturbance for some time before death. He had found the new methyl violet method which he had described in the October number of *The Journal of Mental Science* of great service for the study of the cortical nerve-cells. It brought out the small nerve-cells with a clearness that he had been unable to obtain by other methods. The last five specimens were prepared by Cox's modification of Golgi's sublimate method, the mercurial deposit being further blackened by the method of Mirto. They showed alongside two normal cortical nerve-cells, the condition of varicose atrophy of the protoplasmic processes in two cases of acute mania and one of acute melancholia. Although this condition undoubtedly in many cases represented a genuine morbid change in the nerve-cell, he thought that similar appearances in such preparations were sometimes due to post-mortem change.

The CHAIRMAN said he would desire to convey the thanks of the meeting to Dr. Ford Robertson, and also to Dr. France, for the care with which they had brought these specimens before the meeting that day. That was just the sort of work which one rejoiced to see, and which was a very adequate answer to some of their critics.

#### REGULATIONS FOR THE EXAMINATION FOR THE NURSING CERTIFICATE.

The CHAIRMAN said that they had now to consider the proposed amended regulations for the examination for the nursing certificate. He had one suggestion upon this subject, which was to the effect that no nurse should have a certificate till she had passed through the sick ward or the hospital of the asylum, and had thereby gained practical experience in dealing with the bodily sick. He hoped that would have the general support of the Division. One of the criticisms that had been made was that they certified nurses and attendants who had never had opportunity of administering an enema or putting on a poultice, and those of them who had to see cases in private practice knew that they would be very scrupulous about engaging a nurse who was so unaccustomed to the care of the sick as to be unable to do such simple duties.

Dr. TURNBULL said that those members who were at Newcastle would no doubt have seen the report of the Educational Committee, which was referred for further consideration to the Divisions, to ascertain, if possible, what their opinion in the matter was, and for the Divisional Secretaries to report afterwards. He thought it would help their discussion if he mentioned the principal changes which had been proposed in the regulations. There was a main one, which was that instead of two years' training the nurse must now have three years' training. Formerly the number of lectures required could be attended at any time during the period of training; but now a certain number (nine) would need to be attended during each year. If he got the opinion of the members on these and other points, he would be able to report to the secretary of the Educational Committee. He suggested that they should first take up the question of length of training.

Dr. YELLOWLEES thought that if they put before a woman who was ambitious to be a good nurse that she would need to wait three years till she got her certificate, they would deter some of the best women and drive them from the service. It was for that reason that he had some doubt about a change so serious. It was the universal experience, he thought, that a nurse who intended to devote her life to asylum work either studied for about eighteen months and then went away or stayed permanently in the institution. He thought that the suggested period was too long.

The CHAIRMAN thought that the three years' course was necessary to bring them into line with the general hospital training.

Dr. YELLOWLEES said that he also had thought it was needful for that purpose, but he had found that it was not. He was pleased to find Dr. Wood, who took so much trouble in the matter, saying that it was not necessary.

Dr. CLOUSTON concurred with Dr. Yellowlees' views that they had not got to that point at which they could extend the period to three years. It was too much to expect that a nurse would spend three years in an asylum and three years in a hospital before she was fully qualified for every kind of work. As regards the lectures, he would certainly approve of their being spread over two or three years, to prevent the cramming system. He thought that every nurse should pass through the hospital before she was examined.

Dr. CARLYLE JOHNSTONE said he rose to support strongly the three years' period. He disagreed with Dr. Yellowlees that it would deter the nurses, and he thought it would have the effect of making them more competent. There were a good many nurses who took the certificate and were not a credit to the Association or the service of the public. He thought that there were other reasons for urging the three years' course as a compulsory matter instead of two. He did not think that in any ordinary sized asylum they would be able to give their nurses the real practical training that they required within two years; it would take at least three years to do it. It was quite impossible to put them through the hospital in two years, and he moved accordingly.

Dr. CAMPBELL CLARK said that he was very glad to hear Dr. Urquhart speaking about the practical part of the training. He had been, in season and out of season, speaking and writing about the unsatisfactory nature of the examination and what he would call the utter valuelessness of the certificate, and what Dr. Urquhart said just emphasised what he wanted to say—that he would find many with the certificate who had never given an enema in their lives, who did not know how to make a poultice, and who knew very little about hospital work; and if they were sent to private cases they would assuredly disappoint the doctors in charge of these patients. With reference to the three years' course his mind was perfectly open. He did not feel strongly as regards two or three years, but he felt that the training should be very much more thorough, less ornamental, more practical, and more useful, and he held that the system of examination should be altered to this extent, that there ought to be a syllabus of practical examination as well as a written examination.

In answer to Dr. Clouston, Dr. YELLOWLEES said that the British Nurses' Association were prepared to register the Medico-Psychological certified nurses with the training they had.

Dr. G. M. ROBERTSON seconded Dr. Carlyle Johnstone's motion for three years. There were a great many who came for two years, got the certificate, and left the asylum not so well trained as they might be; and as to Dr. Clouston's statement about spending six years in getting a hospital and asylum training, it was not necessary for hospital nurses to remain three years till they got a certificate: they got it after a year.

Dr. MACPHERSON asked if it was necessary that they should attend the same lectures during each of the three years.

The CHAIRMAN said that they had better keep to the motion, and he would now take the vote.

Dr. CARLYLE JOHNSTONE said if it was to be a matter of taking a hurried vote he would move the adjournment of the discussion to a future date, as to which Dr. YELLOWLEES concurred.

Dr. TURNBULL said that at the next meeting they could make arrangements to allow of this discussion. One proposal was three years against two; another was lectures every year; and a third point was the system of examining the papers—instead of having them examined by the Superintendent and Assessor, that they should be examined by two Examiners appointed for the purpose, and that the whole of the papers over the country should go to the two Examiners. If that was done, it meant probably that there would be a little more expenditure in getting it carried out, and consequently that the fee should be raised from 2s. 6d. to 5s. A minor point was that each lecture must last an hour.

On the suggestion of Dr. Yellowlees, the CHAIRMAN asked Dr. Carlyle Johnstone to add to his motion for adjournment that Dr. Turnbull should place on the agenda paper all the different points for discussion at the Glasgow meeting on the second Thursday in March.

Dr. CARLYLE JOHNSTONE said he would be very glad to do so, but they had been memorialised by the Convener of the Handbook Committee with regard to the Handbook; and if they did not take any action now it would be too late, because that committee met in a few days, and he thought something ought to be said about it.

The CHAIRMAN thought that they could hardly take up that matter without notice of motion.

Dr. CARLYLE JOHNSTONE said that they had got a notice of motion. They were invited to come there and give their views about the Handbook. Besides, as it occurred in the regulations, he thought it came up for discussion that day, and therefore they ought to have a special meeting on an early date.

The CHAIRMAN said that it had been moved by Dr. Carlyle Johnstone that they should have a special meeting for the consideration of the regulations for the examination for nursing certificates, including the Handbook. This was agreed to *nem. con.*, and the matter was remitted to Dr. Turnbull.

By the kindness of Dr. Clouston tea was then served, and the Laboratory was inspected by the members present and these visitors: Dr. Batty Tuke, Senior (President of the Royal College of Physicians), Prof. Cruikshank Brown, Prof. Simpson, Prof. Greenfield, Dr. Sibbald (Commissioner in Lunacy), Dr. Wyllie, Dr. Affleck, Dr. Berry Hart, Dr. Russell, Dr. Gibson, Dr. Philip, and Dr. Boddie. An apology for absence was received from Sir Thomas Grainger Stewart.

The CHAIRMAN then moved a vote of thanks to the Committee of the Laboratory of the Scottish Asylums for their kindness in giving them the use of the rooms, and to Dr. Clouston for his hospitality, and the meeting then terminated. The members afterwards dined in the Palace Hotel.

#### ADJOURNED MEETING OF SCOTTISH DIVISION.

The adjourned meeting of the Scottish Division was held in the Royal College of Physicians, Edinburgh, on 27 November, 1897. Dr. Urquhart was in the chair, and there were also present Drs. Campbell Clark, Carlyle Johnstone, Macpherson, Middlemass, G. M. Robertson, Rutherford, Watson, Watt, Yellowlees, and Turnbull (Secretary). In accordance with the remit from the Annual Meeting of the Association, the Division took into consideration the report of the Educational Committee giving the proposed amended regulations for the nursing certificate. Considerable discussion took place, and it was agreed to submit the following suggestions to the Educational Committee: 1. That the minimum period of training should be fixed at two years. 2. That Rule 3 should (consequent on the preceding suggestion) be deleted. 3. That section *a.* of Rule 5 should read—"Systematic lectures, in addition to the practical demonstrations provided for below, by the medical staff," etc. 4. That sections *b.* and *c.* of Rule 5 should be combined, and should read—"Clinical demonstrations of mental and bodily disease, and practical instruction in sick nursing and in first aid, to be given by the medical staff. At least twelve demonstrations, each of one hour's duration, must be given in each year of training, and no attendant will be admitted to examination who has not attended at least nine demonstrations in each year." 5. That the last clause of section *c.*, Rule 9, should read—"The written questions being confined to subjects included in the Handbook." 6. That in the written examination the maximum of questions to