dynamos; it travels a considerable distance, and we damp it down by a powerful resistance prior to its entering the bath. We give the current of a strength up to 250 milliampères. I have not had a great experience, but we have treated nine cases, and of these five were decidedly improved; one has recovered, and all have gained weight. Cases of adolescent mania, stupor, delusional insanity, melancholia, have been thus treated. Those which have improved are: two cases of stupor, two cases of adolescent melancholia (one of these has recovered entirely), and one case of delusional insanity dependent upon sexual excess, according to the man's own statement. He is gaining weight, and otherwise improving very much in appearance. These results are encouraging. One patient, a case of stupor, jumped out of the bath at once, and began to walk about, almost in his right mind. He explained two days later that he had a frightful shock, and that he would do anything sooner than submit to it again. He at once began to work. Another patient, suspected to be delusional, when the electrodes were applied to his pubic region said, "That's just where my wife gives me the current." We elicited the delusion, but it was not desirable to continue electrical treatment. The cases in which I have looked for improvement are the stuporose and melancholic cases, in deteriorated health.

Dr. ROBERT JONES, in reply to Dr. Clapham: I was careful to select those cases which had no electrical delusions, that being an important point. The method of application is to have the bath at a temperature of 100° F. If a female patient she is clad in a dressing-gown, with nurses in attendance, the electricity is not applied for more than fifteen minutes daily, and the treatment is extended on an average over seven weeks; in some cases it was continued nine or eleven weeks.

Dr. LEWIS JONES, replying to Dr. Robert Jones, said: In cases treated by electricity in conjunction with baths it is difficult to assess the relative amounts of good done by the baths on the one hand and by the electric current on the other. I consider that both contribute to the good result. So far as the effect of electricity in producing metabolic changes goes, that has been completely settled by extensive experiments conducted by D'Arsonval. I hinted at the beginning of my paper that the electric bath is only one of several ways of producing metabolic changes electrically. There are others in which there is no employment of water or baths, and yet the increased tissue exchanges occur in the same way. My own belief is that it is the electricity which is effective to a very large extent in the electrical bath, just as it is in the other modes of general electrification without a bath at all.

A Brief Outline of the Arrangements for the Care and Supervision of the Criminal Insane in England during the Present Century. By RICHARD BRAYN, L.R.C.P., M.R.C.S., Superintendent State Criminal Lunatic Asylum, Broadmoor.

As the mode of dealing with those insane persons who have committed offences bringing them under the authority of the criminal law differs in some respects from the practice followed in the case of the ordinary or non-criminal insane, I thought that on the occasion of the visit of the South-Western Division of the Medico-Psychological Association to this Asylum a brief outline of the history of the arrangements for the care

and supervision of the criminal insane in England might perhaps be of interest to those members who have honoured Broadmoor with a visit to-day.

I do not propose to give a detailed account of the various statutes relating to the criminal insane which have been passed during the present century, but merely to give a general outline of what has been done ; indeed, the time at our disposal will not admit of more.

Any one who desires to go more deeply into the matter, will find an excellent and full account of the "history of legislation as to criminal lunatics" in Mr. A. Wood Renton's *Law and Practice in Lunacy*.

Just a few words with regard to the term Criminal Lunatic. Mr. Wood Renton calls it an ambiguous one, and it is no doubt sometimes applied to persons to whom it is not really and legally applicable. Definitions of the term are given in the Criminal Lunacy Acts of 1867 and 1884, but for practical purposes criminal lunatics may be divided into two classes, viz., Queen's Pleasure Lunatics and Secretary of State's Lunatics.

Queen's Pleasure Lunatics include : (1) those found insane on arraignment, and (2) those who are tried and found "guilty but insane." Secretary of State's Lunatics include : (1) those certified insane before trial, and (2) those certified insane after conviction.

The capital distinction, however, between criminal and the non-criminal lunatics is that the former are in custody by virtue of an order of a court of law. They are transferred from the prison in which they are confined to an asylum upon the authority of a warrant signed by the Secretary of State, and cannot be discharged without his sanction.

Previous to the year 1800 no special provision was made for criminal lunatics, and the mode of procedure in regard to their treatment and disposal was varying and uncertain ; they were either dealt with as ordinary lunatics, or were committed to prison and punished for their offences. The result of this was that "many of the bridewells were crowded and offensive because the rooms designed for prisoners were occupied by lunatics" (Howard, *State of Prisons*) ; and, on the other hand, it was stated by the Attorney General (*Hansard*, 1800, vol. xxxv) that "persons who had committed the most shocking acts, and been acquitted on the grounds of being deranged in

their intellects, had been allowed to go at large and again commit similar atrocities."

On the 28th July, 1800, an Act (39 and 40 Geo. III, Cap. 94) entitled "An Act for the Safe Custody of Insane Persons charged with Offences" was passed, and this is the oldest of the statutes relating to criminal lunatics. It was the direct outcome of the trial of Hadfield for attempting the life of George the Third.

As Dr. Orange, in his Presidential Address delivered at the Annual Meeting of the Medico-Psychological Association in 1883, showed (cf. *Journal of Mental Science*, vol. xxix, p. 332), the Act of 1800, above mentioned, while it empowered the Sovereign to give orders for the safe custody of criminals found to be insane, contained no provision for defraying the expenses of their care and maintenance where they had not sufficient property of their own, and the result appears to have been that many such persons continued to be kept in gaols and houses of correction, instead of being placed in asylums.

The appointment of a Select Committee on Criminal and Pauper Lunatics in 1807 was the next step of importance. This committee recommended "that a building should be erected for the separate confinement of all persons detained under the above-mentioned Act (39 and 40 Geo. III, Cap. 94) for offences committed during a state of insanity."

In 1808 the House of Commons presented an address to His Majesty praying that a separate prison might accordingly be erected, but the plan was not adopted.

Nothing was done until 1814, when wards for the accommodation of sixty criminal lunatics were constructed in connection with Bethlem Hospital, on the understanding that the Government would defray the annual cost of maintenance, but that their control and management should be under the superintendence of the governors of the hospital, and that they should be attended by the medical and other officers of that establishment.

A few years later it was found necessary to double the accommodation at Bethlem, and shortly afterwards still further provision was required. In consequence of this an arrangement was entered into in 1849 between the Home Office and the proprietor of Fisherton House, near Salisbury, for the accommodation of those criminal lunatics who could not be received

into Bethlem. A similar arrangement was made with the Camberwell and Dumfries Lunatic Asylums, and others.

Meanwhile, a Select Committee of the House of Lords was appointed in 1835 for the purpose of inquiring into and reporting upon the state of gaols and houses of correction, and one of its resolutions was that "persons whose trials have been postponed, or who, having been tried, have been acquitted on the ground of insanity, shall not be confined in gaols or houses of correction."

The Act passed in 1800 (39 and 40 Geo. III, Cap. 94) enacted that where any person was discovered and apprehended under circumstances that denoted a derangement of mind and a purpose of committing some crime, for which, if committed, he would be liable to be indicted, he might be sent to prison; but this enactment was repealed by an Act passed in 1838 (1 and 2 Vict., Cap. 14), which made provision that any such person so apprehended might be sent by two justices, acting with the advice of a medical man, to a lunatic asylum.

In 1840, 3 and 4 Vict., Cap. 54 was passed, and by this Act, the main purpose of which was to provide for the removal of insane prisoners to asylums during their insanity, and for their maintenance in such asylums, the regulations made by the Act of 1800 (39 and 40, Geo. III, Cap. 94) with respect to persons charged with treason, murder, and felony were extended to persons charged with misdemeanour.

The wards provided at Bethlem and Fisherton having become filled, and the provision of further accommodation having become necessary, it was at last decided to act upon the recommendation of the Committee of 1807, to build a special asylum for criminal lunatics, and in 1856 the Home Secretary entrusted the erection of the new asylum to Sir Joshua Jebb, Surveyor-General of Prisons, and Broadmoor was selected as the site for it.

In 1859, whilst the asylum was in process of building, another Select Committee was appointed by the House of Commons to inquire into the operation of Acts of Parliament relating to lunatics, and in their report, which was issued in 1860, they observe, with reference to criminal lunatics, that "to mix such persons with other patients is a serious evil; it is detrimental to the other patients, as well as to themselves. But to liberate them on recovery as a matter of course is a still

greater evil, and could not be sanctioned, for the danger to society would be extreme and imminent."

Following upon this report, the Act of Parliament commonly known as the Broadmoor Act was passed, in 1860. This statute gives directions as to the mode in which any place deemed suitable may be appointed a criminal lunatic asylum, and describes the kind of persons who may be confined therein. It also empowers the Secretary of State to appoint a Council of Supervision, as well as officers, attendants, and servants, and to make rules for the government of any asylum appointed under the Act. Under Sections 14 and 15 the Commissioners in Lunacy are required to visit the asylum once or oftener in each year, and to report all such particulars as they think deserving of notice to the Secretary of State every March.

The asylum was opened in 1863, but no male patients were admitted until early in the following year.

As originally constructed, the asylum consisted of six separate blocks for men, capable of accommodating 400 patients, and one block for women, having accommodation for 100. Since then various alterations and additions have been made from time to time, and the asylum now contains 480 beds for men, and 187 beds for women.

Broadmoor has since the date of its opening been the place of detention for female convicts becoming insane during the currency of their sentences, but in the year 1875 an alteration in the system of dealing with male convict lunatics was made, by setting apart a wing of Woking Invalid Convict Prison for their accommodation. In consequence, however, of the diminution in number of the prison convict population it was decided in 1886 to discontinue Woking Prison as a convict establishment, and to make provision for the insane male convicts by enlarging Broadmoor. The convict lunatics, numbering then fifty-eight, were transferred from Woking to Broadmoor in October, 1888.

In 1880 a Commission was appointed by the Home Secretary to inquire into the "subject of criminal lunacy," and its report was presented to Parliament in 1882.

In 1883 an Act called the "Trial of Lunatics Act" was passed, but this Act only affected the phraseology of the verdict to be given when a person is found to have been insane at the time he committed the offence with which he is charged.

A further Act to consolidate and amend the Acts relating to criminal lunatics, in accordance with the suggestions and recommendations of the Departmental Committee of 1880, was passed in August, 1884, and came into operation the following November. This Act makes provision for the certification and detention of insane prisoners as criminal lunatics, and is the statute which mainly governs the practice and method of procedure in dealing with criminal lunatics, in respect to their confinement and maintenance in asylums, as well as their transfer and conditional or absolute discharge.

With regard to the care and supervision of criminal lunatics whilst under detention little need be said, as it differs only slightly from that of the ordinary insane in the county asylums. The treatment of the patients in Broadmoor is based on the same principles as that of other asylums, excepting that in consequence of the dangerous and violent propensities of many of the patients, and the special supervision they require, a much larger proportion of attendants is necessary, and stricter measures to prevent escapes are requisite.

Most visitors to Broadmoor will probably observe that the proportion of patients sleeping in single rooms is much greater than in the ordinary asylums. When Broadmoor was first built the proportion of dormitories to single rooms was much greater than it now is, but the number of patients who were fit to sleep in association without constant supervision was so limited, and so large a staff of attendants on night duty would have been necessary, that some of the dormitories were converted into single rooms. I may here remark that the majority of the patients much prefer sleeping in single rooms, and are constantly requesting to be moved from the dormitories.

The question of the discharge of the criminal insane, more especially those who have committed homicide, is always a serious matter, and often fraught with difficulty. This question was discussed at the Paris International Prisons Congress in 1895, and the danger to society from the too easy discharge of the criminal insane was recognised. The Congress also recognised the need of a combination of judicial, administrative and medical authority in dealing with these cases.

In the case of an ordinary or non-criminal patient, if he recovers his sanity he is discharged, although in certain cases there may be some apprehension as to whether the recovery is

permanent ; but in the case of a lunatic who has committed or attempted to commit homicide, not only has his mental condition whilst under asylum care and treatment to be taken into consideration, but the probability or otherwise of his being able to maintain his mental equilibrium if liberated must be fully and carefully considered. He may be one of those unfortunate individuals—with whom, I imagine, we are all familiar—who, although he may be capable of preserving his mental balance so long as he continues under the favourable conditions, and freedom from care and responsibility, that he enjoys under asylum supervision, would have a tendency to relapse if exposed to any worry or anxiety, and might again become a source of danger to the public if discharged.

The recurrence of the same mental state is, we know, usually accompanied by a recurrence of the same thoughts, feelings, and impulses, and when the history of such a person as above described shows that he is lacking in that reserve of nerve power which is necessary to enable him to adapt himself to the varying external circumstances inseparable from everyday life in the outside world, it would obviously be unsafe to permit him to be set at liberty unless he can be placed under close and reliable supervision. A thorough investigation of the family and personal history of the patient is therefore essential ; and the circumstances in which he will be placed if discharged, as well as his capacity to contribute to his own support, require to be taken into consideration.

Intemperance is frequently found to have been an important factor in determining the criminal act, although it may not have been the actual cause of the insanity.

It will therefore be seen from the foregoing, remarks that although a criminal lunatic ceases to display any symptoms of active insanity, and is able to conduct himself satisfactorily under the favourable conditions of asylum life, it does not necessarily follow that he could, with safety to the public, be permitted to resume his former position in society.

There is another class of cases which presents peculiar difficulties. It is that of married women who have killed their children during attacks of puerperal and other forms of insanity. There cannot be any difference of opinion as to the undesirability of these women having any more children ; but the difficulty is, how are you to prevent it ? If the woman is young

and recovers, and appears to be able to maintain her sanity, she can hardly be detained in an asylum until past the child-bearing age, and public opinion is not yet educated up to the idea of having her sterilised.

In order that the public safety may be safeguarded as far as possible, criminal lunatics are, with few exceptions, discharged conditionally on the undertaking of some relative or friend to keep them under supervision, and to immediately report to the Secretary of State any symptoms or indications which would appear to show that the patient was again likely to become a source of danger to himself or to others. The person to whose care the patient is discharged is also required to furnish periodical reports of the patient's mental and bodily health, but these periodical reports may be discontinued after a time, if the patient's condition and conduct remain satisfactory, the general undertaking to report any relapse remaining in force.

An entirely new table of statistics, which appeared in the Annual Report of the Broadmoor Asylum for the first time in 1899, gives a classification of the crimes and offences of the patients remaining in the asylum on the 31st December of that year. The form of the mental disorder existing at the time of the commission of the offence is noted, and the whole affords conclusive evidence of the association between delusional insanity and homicidal acts. Reduced to percentages it shows that 83·3 per cent. of the total population of the asylum were cases of homicide and homicidal attempts, 81·2 per cent. being males and 94·7 females.

Another table shows the admissions, discharges, deaths and escapes for each year since the opening of the asylum, with the average annual rates of recovery and mortality.

DISCUSSION

At the Meeting of the South-Western Division, at Broadmoor, October 30th, 1900.

The PRESIDENT, in thanking Dr. Brayn for his interesting paper, said that the history now given has enlarged our views of Broadmoor. He had shared the idea that when patients were sent to Broadmoor they were sent for life. He did not know that they were conditionally discharged to the care of friends.

Dr. JAS. STEWART.—I have been accustomed ever since I came over to this country to find that the country of my birth has always been looked upon as a *terra incognita*, but I am somewhat disappointed to find that in all this matter connected with the criminally insane, Ireland in the history of insanity in connection with criminal lunatics was not even mentioned. To come more to the point, with regard to the separation of those who have no mark of crime upon them and the insane who have unfortunately committed a crime. I think it is

very satisfactory that now, at the end of this century, we are able to see that the public has become so enlightened, that our legislators are gradually being so instructed as to the importance of the separation of the two sets of people, that we have this splendid institution to rejoice in as Englishmen, and I am proud to say that Dundrum is an institution of which the whole country may be proud also. It struck me very much, as it did strike you, sir, to-day in going round this institution, to see the large number of single rooms; and it was specially striking that these single rooms were so very prettily ornamented, and that there was an indication of home life in them, and of enjoyment, to a certain extent, of the lives of the individuals who occupied them. We have, therefore, had a great deal of gratification in seeing that the people who are here are not the woe-begone and miserable and unfortunate people that many of us, perhaps, thought; and the further point of their having something to look forward to, which the reader of the paper has emphasised, and to which you have drawn attention, is very pleasant to know,—that they are not here for life, that the misfortune of their having committed a crime while insane is not to be brought against them, and if they recover their reason they may again go amongst their friends. We all feel we owe a great debt of obligation to Dr. Brayn for bringing this matter under our notice, and I hope he will forgive me that, as an Irishman, I was disappointed that my unfortunate country was not mentioned.

Dr. NICOLSON.—The other day I was written to by an American, who is superintendent of one of the asylums there, asking if I could give him an opportunity of speaking to me about the arrangements of Broadmoor, as they were in process of constructing an additional criminal asylum in America. The first question he asked was, What do you think of the dormitory arrangement as compared with private single room accommodation for the patients? I said I was absolutely and entirely in favour of single room accommodation in certain conditions. He said that his experience in America was in the opposite direction, and he felt that sleeping the patients in dormitories by night was in every way the best possible arrangement for carrying out the safety and the comfort of the patients; and I said, "Well, it is impossible for me to say more than to give my experience. Of course we must take it that the individuals treated are mentally affected in the same direction, and that you may have troubles with them owing to the question of escape, trickiness, indecency, quarrelsomeness, and in various other ways." He ultimately confided to me that the evening arrangements in America materially differed from ours; that they sent the patients into the dormitories at seven o'clock, where they indulged in various amusements and recreations for two hours; and that the staff were thus enabled to leave the asylum at an early hour. No arrangement of this sort could be sanctioned at Broadmoor, so that the conditions under which sleeping accommodation is provided vary considerably in the two countries, as compared one with the other. I am quite sure that the single room method in use at Broadmoor is the best arrangement at night, not only for the more noisy and intractable patients, but also for the well-behaved, and for those who are capable of appreciating their surroundings. With regard to criminal lunatics and county asylums, I maintain that the county asylums ought to be, in the first instance, and, as far as possible, responsible for all the lunatics of their own counties. There are certainly a number who oscillate between prison and asylums, and who may be said to be well enough treated in either, but that they should be transferred to Broadmoor away from the responsibility of the county is a course I never have been able to think would be justifiable or proper. I say that each county should have its proper wards set apart for such men. It is a great pleasure for me to be here, and to hear Dr. Brayn give this lucid account of the circumstances that led up to Broadmoor as it now is.

Dr. BENHAM.—Our thanks are due to Dr. Brayn and Dr. Nicolson for the very interesting account they have given us of the management of this institution. For myself I can only express the pleasure I have had in going round it. Nearly twenty years ago I went over a criminal asylum in another part of the British Islands, and there I found in those days patients who had misbehaved themselves were chained to iron supports in the ground, and were strapped with strong leather bandages. On going round to-day, I asked whether any punishments were given to patients, and I was told they were not. One other thing which struck me was

the intelligent look of the patients. I saw none of that residuum of dementia which we find in our chronic asylums. I was told that these persons who had committed crimes undoubtedly had a good deal more force of character than chronic demented who came into the county asylums. I was struck with the large proportion of single rooms, and I quite agree with everything that has been said as to the reward to quiet patients in being put into a room where they can have a little time to themselves. I would only once more thank you for the very instructive lesson that it has been to all of us to come and see what is being so well carried out here for our criminal population.

HON. SECRETARY.—I am sorry that owing to the unpunctuality of trains I was not able to get here so as to go round with you this morning. The most interesting paper given us to-day by Dr. Brayn raises one or two very important matters. The question of single room *versus* dormitory has been lately somewhat paraded before us; but I am inclined to think that after what we have heard and seen to-day it will be generally admitted that it is a very excellent plan to give a single room for a patient to sleep in rather than to place him in a dormitory. At Broadmoor, as elsewhere, suicidal patients are under continuous observation in a dormitory. I am quite sure that we should hesitate before accepting the idea, which I believe is at present being entertained, that single rooms should, to a large extent, be abolished in favour of dormitories. I do not think it is a notion that commends itself to a majority of the Association. (Hear, hear.) I am very sorry to have to differ from our good friend Dr. Nicolson, but I am opposed to the notion of each county making provision for its own criminal lunatics, for I still maintain that the association of patients who have been at Broadmoor with the ordinary cases in a county asylum does somehow not work satisfactorily. Although Dr. Brayn is out of the room, I must express my thanks to him for bringing this most interesting subject before us.

DR. ALDRIDGE.—It has been a great pleasure to me to come to Broadmoor, for of course one has heard a great deal of Broadmoor, and imagined a different state of things to what we have had the pleasure of seeing here to-day. I was much struck by the proportion of single rooms. I think a larger provision of single rooms in all asylums would be advisable, as rewards for good conduct on the one hand, and as means of keeping the dormitories quiet on the other. With regard to single rooms for violent patients it has always struck me as being a very wonderful thing that at Fisherton they are always able to deal with violent lunatics there, and on going round a good many years ago I was just as much struck there with the fact that they had not got a single room. I knew that from Wakefield had been sent two or three most violent cases there, and they had been absorbed amongst a violent lot, and had not attained that terrible individuality which they had in the general wards at Wakefield. With regard to the provision of an asylum for such troublesome patients, who are not criminals or criminal lunatics, but a source of great trouble and annoyance in the asylums where they are placed. Large counties, I think, may possibly follow the suggestion Dr. Nicolson has thrown out of providing special places for such troublesome patients, but possibly if there was some asylum which could be extra well staffed and extra well provided with single rooms, and where discipline of a little more severe character could be carried out, I think very many of the county asylums would be the happier for getting rid of these very troublesome patients. Of course districts make a difference in the general character of the patients. I remember in going through Lancashire asylums being much struck with the more uproarious character of the patients than in going through asylums in the southern counties and the West Riding. Patients coming from certain districts are more undesirable than those from other portions of the county. Large counties can provide that graduated treatment which smaller ones cannot do. In that sense possibly an asylum for the treatment of such cases would relieve the life in other asylums. I rather expected Dr. Brayn would have given us some information which would have been valuable as to how the system of discharge works out here. Many of the patients sent here, especially the women, are curable cases probably, and in ordinary asylums probably would be discharged in a very short time. Here they are kept under observation for a longer period, and it would be interesting to know what was the average period or shortest period considered safe that such a patient might be discharged. In the case of curable cases no doubt exactly the same

condition occurring again under similar conditions would regulate the rate of discharge, and again also the question of liability to phthisis and to other diseases as against what one meets with in general asylum conditions; and the death rate—one or two points of that kind would have been interesting to hear. Perhaps he may give us one or two bits of information of that kind when he replies.

Dr. BRAYN.—First of all I would like to tell Dr. Stewart I had not any intention of rendering injustice to Ireland, but found that unless I kept very strictly to the point it would involve making a very much longer business of it, and as I thought that there was another paper to be read I could not possibly occupy so much time. The only other point I remember is about the period of detention of female patients. Every case is decided on its merits, and it all hinges on the probability of the patient relapsing; if she has been insane before, the circumstances under which the insanity occurred practically settle it. With regard to the death rate—our death rate is somewhere about 3 per cent.

Epilepsy and Crime. By JOHN BAKER, M.B., Deputy Superintendent, Broadmoor Criminal Lunatic Asylum.

IN studying epilepsy we see and study symptoms only. The pathology of the disease is very obscure, and it is mainly from its clinical features that we are able to assume the presence of detrimental changes in the more highly specialised tissues of the cerebrum. These changes may be primary or developmental as in the idiopathic type; or they may be accidental, and due to toxic agencies or traumatic injury; or they may be senile, as seen in rare cases (not accidental) occurring in late adult life or old age. Whatever the origin, a condition of nervous instability is set up, which may vary in every possible degree, from simple molecular disarrangement, giving rise to perverted functional action for a brief period of time only, to more lasting effects which conduce to morbid energising of a permanent nature.

In the light of our present knowledge of the disease it is almost impossible to formulate a definition of epilepsy that will be at once specific and comprehensive, for the reason that so widely divergent views are held as to its limitations. For our immediate purpose we have elected to quote the definition of Professor Ottolenghi, one of the ablest of the followers of Lombroso, because its scope is all-embracing, and because it is sufficiently elastic to commend itself to those who hold the most advanced opinions on the subject. Ottolenghi states that "epilepsy is a functional degenerative syndroma, which takes more or less intensely one or other of the following