ciples must, at all events, be maintained, viz., a thoroughly efficient, permanent, and independent body of visitors, and every facility given, under proper control, for the early treatment of every case. Well, gentlemen, I will only add that it is my humble prayer to Almighty God that associations such as this may ever flourish and abound. (Loud applause).

Mr. J. T. HIBBERT, M.P., responded for the House of Commons. Dr. FARQHARSON, Mr. BIRLEY, M.P., and others responded to their healths.

# BRITISH MEDICAL ASSOCIATION ANNUAL MEETING, CAMBRIDGE, 1880.

President: J. C. Browne, M.D., LL.D.; Vice-Presidents: Dr. Dees, Dr. Blandford; Secretaries: Dr. Bacon, M.A., Dr. Sutherland.

## SECTION OF PSYCHOLOGY.

It is impossible to do justice to the President's Address by a short abstract. Its most important feature is, that it fully recognises the real as well as the apparent increase of insanity and allied nervous disorders amongst us. The former position was maintained some years ago by Dr. C. Browne, when he endeavoured to show that the usual explanations brought forward to account for the numerical increase were falsified by the experience of the West Riding Asylum, of which he was at that time the Superintendent.

Another feature of the Address is the emphatic approval of the decision of the General Council of Medical Education, not to make Mental Diseases a subject of separate examination in the licensing bodies of the Kingdom, as proposed by Dr. Clouston and Dr. Bucknill at the 1879 Meeting of our Association. It must be admitted that, so long as the present immoral crowding, not only of subjects, but their minutiæ, into pass examinations continues, this conclusion possesses a certain melancholy force, but could not a compromise be made between the claims of Psychological Medicine and an exhaustive knowledge of every other subject that can by possibility be dragged into the curriculum of the medical student? If this conclusion to exclude the former is justified by present demands on the student, no greater argument could be adduced to support Mr. Huxley's condemnation of medical examinations as now conducted.

Cases of Alcoholic Insanity in Private Practice. By H. SUTHERLAND, M.D. (London).—Dr. SUTHERLAND read a paper on Cases of Alcoholic Insanity in Private Practice. From a careful investigation of 200 private cases—100 male and 100 female, he had arrived at the conclusion that, in many cases intemperance was put down as a cause of the mental disorder, when it was in reality only a premonitory symptom. The Commissioners' tables give 14 per cent. of cases of insanity caused by intemperance in drink, but of these 14, probably three at least were cases in which intemperance was a premonitory symptom. This would reduce the percentage to 11. The differential diagnosis between cases of insanity caused by and those accompanied by intemperance, was given at length. The paper concluded with a relation of cases illustrating the difference between the two forms of insanity produced by intemperance.

Mr. Mould (Cheadle), proposed a vote of thanks to the President for his Address.

Dr. HACK TUKE (London) seconded the motion, which was carried.

Discussion on the Influence of Alcohol in the Causation of Insanity.—

The discussion on the Influence of Alcohol in the Causation of Insanity was

opened by Dr. G. M. BACON, M.A. He commenced by alluding to the prevalent opinion that a large proportion, both of insanity and crime, was be to attributed to intemperance; and declared it to be his opinion that the matter was by no means proved, and was greatly exaggerated. He contended that, as a sole or main cause, intemperance did not hold the chief place, and that the most reliable statistics did not support this conclusion. Dr. Bacon showed that, in several of the agricultural counties, the proportion of cases attributed to drink varied from 5 to 14 per cent.; that in several others, where coal-mines and iron manufactures existed, the percentage varied from 3 to 29; while, in certain large towns, the rate varied from 2 to 30 per cent. He argued that such figures disproved themselves, and were unreliable. He further showed that, in a majority of cases, numerous potent causes were associated with intemperance—such as the existence of organic disease, like general paralysis, or hereditary influences, blows on the head, sunstroke, etc.; and urged that these influences were not sufficiently regarded. He proceeded to illustrate his views by his experience in the Cambridge Asylum. He had analysed 1,950 separate cases, and found that of 75 attributed to drink, at least 40 could be assigned to other causes—such as those before alluded to; and, moreover, that the ages of the patients and the history of their symptoms were inconsistent with the common experience of those cases in which intemperance was the main or sole cause. It was, therefore, he said, impossible to accept the statement that 14 per cent. of the insanity of the kingdom could be properly attributed to drink; and suggested that 4 per cent. would be nearer the truth, though admitting that great differences existed between the large towns and the rural population. He exhibited tables, showing the proportion of cases attributed to drink in eleven rural and in five mining districts, and in several large towns. It appeared from these that, while Ipswich ha

Tables showing percentage of Insanity attributed to intemperance in the following districts:—

-	TAB	LE A.			
	Total.		M.		F.
Cambs	7.8	••••	8.6	•••••	7·1
Bucks	10.7	••••	14.5	•••••	6.6
The Three Counties	14.03		25.0	•••••	8.3
Norfolk	6.0	*****	9.4	•••••	2.6
Suffolk	7.8	••••	17.2	•••••	_
Wilts	11.1	•••••	21.6	••••	3.2
Dorset	14.2		23.3	•••••	8.2
Oxon	5.2		8·1	••••	3.7
	Tab	le B.			
Derby	16.5	••••	20.1	•••	9.2
Durham	$29 \cdot 2$		41.2	•••••	15.4
Hereford	26.09	••••	37.5		18.3
Worcester	21.9	••••	<b>35·2</b>	••••	8.2
Cornwall	<b>3·5</b>	••••	7.6	••••	_
	Tab	le C.			
Newcastle	18.9		27.2	•••••	6.9
Ipswich	20	•••••	3.7	•••••	_
Birmingham	24.6	••••	39·3	•••••	11.1
Bristol	12.06	••••	6.4	•••••	15.9
Norwich	30.0		43.7	•••••	20.0

Dr. HACK TUKE said that, whatever opinion might be entertained as to the question now under discussion, all would concur in holding that it was only by following out the method which had been adopted by the readers of the

papers that they could arrive at correct conclusions. Those who wished to arrive at the truth must base their deductions upon ascertained facts, and not rest satisfied with vague generalisations. With reference to the statistics of Commissioners, he agreed with Dr. Bacon's criticism that they had in some particulars broken down, though the general result might be about right. There were so many factors requiring careful observation and consideration that they need not be surprised at its being shown that some mistakes had been made in the figures. He had at one time collected particulars respecting a great number of cases, and had come to the conclusion that there were 12 or 13 per cent. of cases of insanity due to drink. Though no doubt many cases were, as alleged, put down to this cause which ought not to be, yet it should not be forgotten that many of the friends of patients did their best to conceal the cause of insanity when it arose from drink. In reference to the amount of insanity produced by it in Cornwall, to which reference had been made as the lowest in the list in the tables of the Commissioners, he remembered the estimate given to him when visiting the asylum at Bodmin. The superintendent told him the superintendent told intendent told him, that up to that time drink had produced only about 5 per cent. of the insanity there, and any one who had any experience of Cornwall knew that one would expect to find a low percentage of insanity from this cause. In this particular the Lunacy Blue-Book was confirmed. The percentage was high at Birmingham, as he had reason to know from Dr. Whitcombe, and in this instance also the Commissioners' tables were correct. Reference had been made to the York Retreat; and, as he had lived some years in that institution he was able to say it was a fact that the patients who came there were very rarely intemperate in their habits. One of the remarkable results of his experience at that institution was that along with this fact, though whether in consequence of it he did not pretend to say, he had rarely seen cases of general paralysis there, to study which he had at that time to go to the neighbouring County Asylum. As to the relative prevalence of the insane in the Society of Friends, to which Dr. Bacon had referred (quoting Dr. Clouston), that was a difficult question to decide, because, while their number could be accurately ascertained in a small body, this could not be done in the population at large. He differed entirely from the statement that 50 per cent. of the cases of insanity were due to drink; at the same time he should expect to find that a considerable portion of the insanity existing owed its origin to this cause, but there was a great difference between 14 or 15 per cent. which the Commissioners' tables showed, and the estimate put forward by Lord Shaftesbury. Certainly a strong a priori argument might be raised in favour of the probable influence of drunkenness, for they all knew the action of alcohol in producing morbid products in the brains of animals fed upon it, and no one denied that it caused delirium tremens in man. It was, however, only by a careful analysis of cases, such as they had had that day, that they could arrive at the real proportion of cases of insanity caused by drink. When at the Paris International Congress of Mental Medicine, he met with M. Dagonet, who had investigated three hundred cases of patients who were drunkards before they were insane. These should go side by side with Dr. Sutherland's two hundred cases. Supposing that in Cornwall the drinking habits of the people increased, what might be expected to be the result, as regards the frequency of mental disease? We might judge from the experience of France. M. Lunier, one of the Inspectors of Asylums, had shown that the Departments in which the consumption of alcohol had increased most were those in which there had been a corresponding increase of insanity. This was shown most strikingly in regard to women, at the period when the natural wines of the country gave way to the consumption of spirits. He had given a most instructive table of the increase per head in the consumption of alcohol from 1831 to 1869, accompanied by the corresponding increase of cases of insanity. It could not be said that this resulted from an insane craving for drink. It was not a premonitory symptom. The alcoholic beverages had been brought to the people. Without taking an exaggerated view of the general subject, there were not only reasons, therefore, for expecting alcohol to cause a considerable amount of insanity, but there appeared to be facts within reach to prove this to be actually the case.

Dr. James Edmunds (London) said nothing could be more difficult than any attempt to disentangle the facts connected with our drinking habits and the occurrence of insanity. Insanity seemed to crop out as the result of two directly opposite conditions of life. One condition existed among the Society of Friends, in which the weaklier members were taken so much care of that they survived to reproduce weakly and neurotic members, who might be said in the next generation to go on adulterating the national stock. Out of such a condition a large number of insane persons would naturally grow, inasmuch as under ruder conditions of life their progenitors would have been killed out in the struggle for existence. Thus it was, that among the Society of Friends, where intemperance was very uncommon, there was a large proportion of insanity. Without attempting to define the exact relationship of drunkenness and insanity as cause and effect in these various communities, he would refer to certain things on which every one present would be agreed. Firstly, men, if of strong constitutions and fairly organised all round, might go on drinking considerably and continuously to an advanced age without apparent injury, although, in point of fact, they underwent a slow degeneration of tissues. Certainly, also, such drinkers did accumulate masses of spongy tissue which had been referred to by Dr. Crichton Browne as denoting not the highest type of human development, while in their children much more serious degenerations were seen. Then, again, where alcohol was taken in somewhat large quantity, it produced in the individual drinker, firstly, disease of the liver; secondly, disease of the kidneys and of other excretory organs; thirdly, coarse forms of degeneration, such as atheroma, and fatty change in the blood-vessels and other structures. Out of these degenerations came ruptures of the bloodvessels, clotting in the arteries, heart-failure, and as a direct consequence, paralysis, apoplexy, and other coarse neuroses. In acuter forms of alcoholic poisoning, also, epilepsy occurred in consequence of urea accumulating in the blood, and feetid breath demonstrated a generally putrescent condition of the drinker. Dr. Hack Tuke had stated that, in the Friends' Retreat at York, he had almost never seen a case of general paralysis, and that the effects of drinking were extremely rare in the patients. As the result of much careful observation, he was distinctly of opinion that the free use of alcoholic beverages brought those cases which Dr. Crichton Browne had described as neurotic into the crazy or insane circles; and that, where the brain itself was much exposed to other injurious influences, a reliance on alcohol brought strong healthy

persons into the neurotic or crazy circles.

The Intemperance of Parents a Predisposing Cause of Inbecility in Children. By Fletcher Beach, M.B., M.R.C.P. (Darenth Asylum).— His experience led him to assign to parental intemperance a more important part in the production of imbecility than was assigned to it by the other superintendents of public institutions for imbeciles in the United Kingdom; and he believed that the prevalence of parental intemperance, in his cases, was due to the fact that his patients were drawn from a lower class of society, in whom intemperate habits largely prevail. The history of the subject was then given, reference being made to a table drawn up by the medical officers of American institutions for idiotic and feeble-minded persons, showing that parental intemperance was present in 38 per cent. of the cases. Eight hundred and thirty-three patients had been under the care of the author of the paper, and of these he was able to obtain histories in 430 cases. Of these 430 patients, there was a history of parental intemperance in 138—an average of 31.6 per cent. Statistics of these 138 cases were given, showing that 72 were males and 66 females. Of the 72 males, 47 were congenital and 25 acquired cases; of the 66 females, 44 were congenital

and 22 acquired origin. It was shown that parental intemperance was far more common among the fathers than the mothers of the patients; and that all degrees of intemperance, from occasional drunkenness up to delirium tremens, were present. In a few cases it was found that drunkenness was a family failing. The following classification of the 138 cases in which parental intemperance prevailed was adopted: 1. Intemperance alone apparently the only predisposing cause; 2. Intemperance accompanied with fright; 3. Intemperance associated with phthisis; 4. Intemperance complicated by insanity or imbecility; 5. Intemperance in conjunction with neuroses of different kinds; 6. Intemperance complicated by several predisposing causes. Taking these classes in the above order, it was found that 27 were included in the first; 16 in the second; 22 in the third; 15 in the fourth; 17 in the fifth; 26 in the sixth; and 15 in the seventh class. The author concluded by stating that parental intemperance alone, in a few cases (27 out of 138), acts as a main or direct cause; but that, in the great majority of cases, it was only an indirect, accessory, or predi-posing one. He did not believe it to be usually the chief cause; but he thought it was one which the medical profession should not overlook. [The paper was illustrated

by excellent photographs.]

Dr. SHUTTLEWORTH (Lancaster) remarked that the statistics of Dr. Fletcher Beach, as to the influence of parental intemperance in the causation of idiocy, showed a much larger percentage than did those brought forward by himself in a paper read some years ago at the Manchester Annual Meeting of the Association. Whereas in that paper he himself ascertained parental intemperance as a factor of idiocy in no more than sixteen cases out of three hundred cases investigated at the Royal Albert Asylum, Lancaster, Dr. Beach showed no less than 31 per cent. of his cases in which parental intemperance was traced. Whence arose this discrepancy? Mainly, no doubt, from the difference of social level of the two classes of patients. Dr. Beach's patients belonged to the class of metropolitan paupers, amongst which there was undoubtedly much intemperance, and the vice was readily acknowledged. The patients of the Royal Albe t Asylum, who furnished his own statistics, were not paupers, and many of them came from agricultural districts. In estimating intemperance as a cause of idiocy, the negative as well as the positive aspect of the question should be considered. In how many cases was drunkenness a cause of pauperism, without being also a cause of idiocy in the offspring? and what more natural for a pauper to assign as the cause of idiocy in the offspring than intemperance, overlooking hereditary neuroses or other influences? In making these remarks, he only desired to speak in the interests of scientific accuracy, and not to diminish aught from the excellent moral lessons of Dr. Beach's paper. He might add that, in his own paper, he had considered none but congenital and non-epileptic cases. With regard to the more recent statistics of Dr. Kerlin (of the Pennsylvania Institution), his impression was that the 38 per cent. quoted by Dr. Beach was scarcely comparable with the 31 per cent. derived from Dr. Beach's own observations, inasmuch as not only parents, but grandparents, on either side, had been taken account of by Dr. Kerlin; and, as he read the tables of the latter, out of one hundred idiotic children thirty-eight would have had intemperate parents or grandparents; that is to say, for this percentage, the history of six hundred progenitors (parents and grandparents) would be scrutinised, against two hundred (fathers and mothers only) for the percentage (31.6) quoted by Dr. Beach. The method adopted by Dr. Kerlin of extending his inquiries to two generations of progenitors, was much to be commended; and in this way the influence of intemperance would come into the etiology of idiocy to a considerably increased extent. He himself was of opinion - and he knew of several instances—that not unfrequently idiocy was connected with

the intemperance, not of parents, but of grandparents.

Dr. More Madden (Dublin) would not regard the question of intemperance and insanity from a sensational point of view. Different people were differently

affected by alcohol. Some were better without any. Others could take large quantities and live a long life; but he believed that such persons accumulated spongy elements of tissue in their brains, which prevented them doing justice to themselves. The question as regards the mother's intemperance should be considered under the heads of drunkenness during pregnancy, during parturition, during lactation, and under chloroform.

Dr. J. SEATON (Sunbury) was disappointed with the experiences of Drs. Beach and Sutherland. He had never met with a case in which intemperance was a premonitory symptom. He was unable to remember any case of general paralysis caused by intemperance.

## Thursday, August 12th.

The Influence of Alcohol in the Causation of Insanity.—The discussion on this subject was resumed.

Dr. LANGDON DOWN (London) remarked that his statistics corresponded almost exactly with those produced by Dr. Shuttleworth, and believed that the discrepancy between Dr. Shuttleworth's and Dr. Beach's statistics was due to the fact that they had to deal with different classes of society. Dr. Down remarked that Dr. Beach had not alluded to developmental cases—these were those connected with the first, with the second dentition, and with puberty-as immediate causes. He thought that if Dr. Beach had analysed his cases more carefully in this mode his statistics would have more nearly assimilated those of Dr. Shuttleworth at Lancaster, and his own at Earlswood; which showed that 15 per cent. of the cases were those in which intemperance was a very strong factor. In the institution at Normansfield intemperance could not be placed as a factor in more than 2 per cent. but the they were patients of a second state of the strong special class. Thus then, taking the middle stratum, the percentage would be 15 per cent., and in the higher class only 2 per cent.; whilst Dr. Fletcher Beach dealt with a special class of cases in which, from the circumstances and habits of the parents, intemperance might be expected to be a very important factor. There was no doubt in his mind that there were cases of idiocy the cause of which was intemperance pure et simple. He had known as many as four children born of parents whose intemperance was most distinctly the cause of the idiocy of the children. He was also satisfied that there was a kind of idiocy which was produced by acute intemperance at the time of procreation. He had no doubt that procreation under the influence of intemperance was a strong cause of idiocy

Dr. HARRINGTON TUKE (London) considered that we ought not to be too hasty in setting down intemperance as a cause, in our present condition of histological knowledge. He had never met with a case, in the upper classes, of general paralysis being produced by alcohol; and considered that this disorder ought to be removed from the category of those diseases produced by alcoholic

Dr. Ridge (Enfield) believed that Lord Shaftesbury, and those who had recorded large percentages of cases of insanity caused by alcohol, had been misunderstood. The indirect influence of alcohol in the production of mental disease was more to be considered.

Dr. BRUSHFIELD (Brookwood) said that he thought that alcohol was undoubtedly a factor in the production of insanity. Unfortunately, as he thought, this was denied by some, whilst others described it as a very powerful cause. Dr. Seaton said that no case of general paralysis or insanity had been caused by intemperance. He was sorry to say that his own observation was directly opposed to that. He agreed with Dr. Down that it was often, when not a direct cause, a contributory one. Insanity very often occurred to men who were ordinarily temperate, who, finding themselves breaking down, resorted to drink.

With respect to the contention that sexual excitement was not unfrequently a cause of general paralysis, he was unable to concur, being of opinion that sexual indulgence was a consequence more than a cause of the disease.

Dr. BATEMAN (Norwich) remarked that Dr. Kerlin of America had produced some valuable tables, in which 32 in 100 cases of idiocy were considered due to

intemperance in the parents.

Dr. EASTWOOD (Darlington) remarked on the difficulty of treating cases of dipsomania. He believed Lord Shaftesbury's statement, that 50 per cent. of the cases were due to intemperance, was excessive. He considered that intemperance was seldom a cause of general paralysis; that it was more often due to overwork, and to not taking proper holidays. Such a man would take alcohol as an artificial stimulant. It should, therefore, be considered as secondary. as an artificial stimulant. It should, therefore, be considered as secondary.

Dr. Turnbull (Liverpool) had seen cases of idiocy in private practice, but

none due to intemperance in the parents.

The President remarked upon the great moderation and temperance which had been displayed during the discussion. He thought medical psychologists could not sanction extreme views on the one side or the other as to the relations of intemperance and insanity. They could not admit that 50 per cent. of mental disease was due to drunkenness; nor could they allow that alcohol was a harmless agent, that never did any mischief in the nervous system. Alcohol seemed to him to have an immediate and deleterious effect upon the highest nerve-centres, and might induce insanity where there was no predisposition to nervous disease, and no intermediate conditions of tissue-degeneration Perfectly healthy persons, if saturated with alcohol for a sufficient length of time, might be made insane; and there was a continuous series of mental diseases which might be traced to the toxic action of alcohol upon the nervous system. This series consisted of-1, delirium tremens; 2, mania à potu; 3, the monomania of suspicion; 4, alcoholic dementia. In these diseases, no question could possibly arise as to whether drinking was a cause or an early symptom. In all possibly arise as to whether drinking was a cause or an early symptom. In all of them it was a cause, and an efficient cause, which might by its sole action establish the pathological state; just as lead might, unaided, bring on colic or wrist-drop. But alcohol might be not only an efficient and direct cause of insanity, it might also be a contributory or a remote cause. It was a contributory cause when, in conjunction with hereditary predisposition or enfeeblement of the nervous system produced in other ways, it brought on mental derangement, in the causation of which it was an important, but not a sole, factor. Under these circumstances, it was the spark applied to a prepared train, or the last straw that broke the camel's already overstrained and yielding back. general paralysis, alcohol was, when it played any part in the setiology of the disease, invariably a contributory cause, conspiring, with functional abuses of other kinds, to bring about the pathological catastrophe. But alcohol might also be a remote cause of insanity, as when a state of drunkenness led to a cranial also be a remote cause of insanity, as when a state of drunkenness led to a crainal injury in the tottering drunken man himself, or in some one who was the victim of his violence—this cranial injury resulting in mental degeneration; or, as when a career of intemperance led to the squandering of wages which ought to have been spent on food, and consequently to the partial starvation of wife and children, and to an attack of melancholia in the former, made anæmic by lactation, an inadequate supply of nutrition, and household cares. Dr. Crichton Browne referred to the researches of Marcet, Anstie, and Magnan, as supporting the conclusions at which he had arrived; and mentioned that he had himself at one time produced in dogs, by continuously administering small doses of alcohol to them, a succession of disordered mental states strikingly analogous to those which were seen in the human subject as the results of alcoholic poisoning, again and again repeated. He thought that the statistics of the Commissioners in Lunacy as to the influence of intemperance in the production of insanity, notwithstanding the discredit that had been thrown on them, represented pretty nearly the true state of the case. No doubt, in these statistics, there were included, under the heading of "Intemperance as a Cause of Mental

Disease," a certain proportion of cases in which intemperance was an expression of a diseased state already established, and had nothing to do with causation; but, on the other hand, there were certainly included in that large mass of cases at the end, in which the cause of the insanity was unknown, a certain proportion of cases in which secret, or concealed, or unrecognised drinking was really the undiscovered cause. The one error, he thought, balanced the other; at any rate, in two distinct and very minute investigations in which he had himself engaged, embracing 1,000 cases, and in which he had carefully distinguished between intemperance as a cause and as a symptom of insanity, the result obtained corresponded closely with that of the Commissioners, and showed that about 15 per cent. of the insanity of Yorkshire must be ascribed to alcoholic excesses in that county. He offered a physiological explanation of the action of alcohol on the nervous system, maintaining that it first excited and then paralysed every nerve-centre in succession, beginning with the highest and ending with the lowest, and that its action was not simple, but doubly and trebly compound. The highest inhibitory and controlling centres upon which its primary action was exercised could not be paralysed repeatedly without grave danger to mental integrity. To weaken volition was to promote anarchy in mind.

Mr. MOULD remarked that the discussion had proved that figures were not of any very great value. General paralysis, in his experience, was often caused by alcoholic excess. With regard to dipsomaniacs, his experience pointed to a recurrence of bad habits. One patient had been maniacal not less than one hundred and fifty times, and on each occasion he recovered in three days. believed that the effects of alcohol were the same in both classes of life, although the quality of the alcohol might differ.

Dr. HARRINGTON TUKE believed that a rich man might drink with less risk to his prospects than a poor one, who would by such conduct be thrown out of work and become destitute.

Dr. MARTIN contrasted the percentage of insanity from drink of Cornwall,

3.5 per cent., with that of Durham, 29.2 per cent.

Dr. STEWART considered that all remote causes of insanity from alcohol should be excluded from the discussion. We should rely only on the statistics of those who had read papers, which could be thoroughly depended on. The poorer classes, however, supplied a larger proportion of statistics. He believed that the word "dipsomania" should be excluded from our nomenclature. Alcohol might produce very bad effects upon a patient, without such patient having been ever intoxicated. This was frequent in the upper classes. Constant contact with persons of stronger will was the only mode of curing dipso-

Dr. CHEVALLIER (Ipswich) could not speak so respectfully of statistics as did Drs. Bacon and Sutherland. He believed the reason for the differences in the asylum statistics with regard to etiology were due to the loose method which existed in taking the cases on admission, the statements of the relieving officers being frequently untrustworthy. The relieving officer was not the proper person to say what is the cause of the insanity. The medical men who signed the certificate should alone be depended on. His experience differed from that of Dr. Seaton, having met with two cases in which intemperance alone was the cause. In one, the mental disease undoubtedly came first, and the disease afterwards.

Dr. BACON was glad that his statements had been so favourably received. He did not agree with Dr. Stewart's statement, that general paralysis was so infrequent in Ireland, because there whisky was drunk instead of beer. Nor did he agree with Dr. Ridge that insanity should be stamped out. The strongest criticism had come from the President. He was ready to accept his statement that cut of 1,000 patients (in Yorkshire) he had found 15 per cent. attributable to drink. The discussion showed how careful they ought to be as to the way in which they made their observations.

Dr. SUTHERLAND remarked that he relied upon a group of symptoms, not a

single one, in his distinctions between insanity caused by, and that accompanied by, intemperance. He was unable to understand how Dr. Seaton could state that general paralysis was not caused by alcohol, when the tables of the Commissioners gave such large percentages.

Dr. FLETCHER BEACH remarked that his paper was founded upon careful inquiries directed to the parents of idiot children, by a series of questions he had prepared on the subject. In many cases, tedious labour and the use of instruments produced applyxia and subsequent stupidity.

instruments produced asphyxia and subsequent stupidity.

Certain Cases of Functional Ischamia of the Brain.—By Professor Ball,
M.D. (Paris).

The PRESIDENT observed that this paper could not well be discussed. While agreeing with Dr. Ball as regards symptoms, he thought possibly the etiology of the cases might be different from that brought forward.

Dr. STEWART related a similar case, where deafness had been produced by the firing of a large gun, with subsequent recovery.

Dr. Wood (Nova Scotia) recorded a case where a language had been suddenly restored. The patient at first could only speak in Irish, till the sight of a canary bird made her speak English, which she knew perfectly before the attack.

Professor Ball agreed that such cases agreed entirely with those mentioned in this paper.

Cutaneous Discolourations in the Insane resembling Bruises.—By G. F. BLANDFORD, M.D. (London). The object of the writer was to draw attention to certain discolourations which were occasionally seen on the bodies of insane patients, and which, at first sight, so closely resembled bruises, that blame might be unjustly cast upon attendants, unless considerable care were taken in the diagnosis. Attention was directed to such cases by Dr. Bucknill so far back as 1855; and, in the first volume of the "Asylum Journal," was a paper by him on the subject, and some examples were given, to which, in a subsequent paper, others were added by another gentleman. In the rest of the volumes of the "Asylum Journal' and "Journal of Mental Science," no mention was made of such cases, and, for this reason, the writer described one in his own practice: a gentleman in a state of acute melancholia, over whose gluteal region a large discolouration was discovered, of a dark plum colour, exactly resembling a braise, and at first thought to be one. Gradually, however, it spread up the back; and, as he was lying in bed, the idea of bruising was precluded. Such discolourations might appear in parts where it would be difficult to apply external violence, and they were uniform in the parts affected at the same time, whereas bruises presented different degrees of shade and colour. They depended on the condition of the patient, a condition allied to scurvy, and it was important to consider the diet of such patients, and to take care that the necessary elements were supplied.

Dr. Chevallier (Ipswich) asked whether or not such discolourations were found in those not insane?

Dr. Harrington Tuke had seen such discolourations in alcoholic cases not insane

Dr. RICHARDS (Hanwell) had seen such discolourations in patients fed only with a spoon, without vegetable diet. Such spots were allied to purpura.

The PRESIDENT believed that such ecchymosis occurred in old people, but believed they were more common in the insane.

Dr. BEACH (Darenth) had seen similar discolourations in low imbeciles.

Dr. SUTHERLAND had seen a case where slight injury produced a large bruise in an insane patient who died shortly after from natural causes, proved by post-mortem examination:

Dr. Dr Wolf (Nova Scotia) also spoke on the subject.

Dr. HUGGARD remarked on the similarity of the cases to purpuric affections.

Dr. Blandford remarked upon the medico-legal importance of recognising

the fact that such ecchymosis could be produced in the insane apart from

Rapid Death from Homorrhage into the Pons Varolii and Medulla Oblongata. By W. Julius Mickle, M.D., M.R.C.P.—In the case described there was sudden profound apoplexy; respiration ceased at once; slight momentary revival followed artificial respiration, which was carried out effectually; but life was extinct within seven or eight minutes (at the most) of the sudden seizure. Although the lesion present was too severe to permit of recovery, yet one of the practical bearings of the case was in support of Schiff's teaching that artificial respiration was the appropriate remedy when death was imminent from such intracranial hæmorrhage as threatened to suspend the functions of the medulla oblongata more especially. obvious medico-legal importance also attended a case such as this in which death occurred with extreme or unusual rapidity. Some pathologists had denied to intracranial hæmorrhage the power to kill very rapidly, much less instantaneously. Nevertheless, that the rapidity with which intracranial hæmorrhage might prove fatal had been underrated by some, was obvious, from the examination of certain cases already on record, few although these might be. If one examined the question of rapid death from hæmorrhage into the pons Varolii and medulla oblongata, more especially, the easily available examples were apparently rare. The usual explanation of more or less rapid death in the latter group of cases was, that suspension of the respiratory function occurred from injury or inhibition of centres in the medulla oblongata, ministering to respiration. But in the case forming the basis of this paper, artificial respiration was fully carried out. Death, therefore, was here apparently due to the influence of shock, and the inhibitory influence on the heart of the lesion of the medulla oblongata and pons.

## Friday, August 13th.

On the Best Mode of Tabulating Recoveries from Insanity in Asylum Reports.—By D. HACK TUKE, M.D. (London). Dr. Tuke insisted on the importance of distinguishing between recoveries of patients and recoveries from more than one attack of insanity in the same person. He illustrated his observations with several tables, which he proposed to have introduced into future reports of asylums, the time for making the improvement being especially opportune, as the annual meeting of the Medico-Psychological Association has just appointed a Committee to revise the statistical tables of asylums. (See Original Article, No 5.)

Dr. Blandford agreed with Dr. Hack Tuke's proposal, that the mode of taking statistics at present in vogue required amendment. He pointed out the fallacies which might arise if a patient were admitted to an asylum different to that he first became an inmate of.

Dr. SUTHERLAND hoped that Dr. Tuke would supplement his paper on a future occasion by informing them what forms of insanity were most liable to recurrent attacks. This was most important in private practice, where the relations were not only anxious to know if the patient would recover from a first attack, but also what his or her liability might be to a second one.

The PRESIDENT while agreeing with Dr. Tuke's proposal as regarded the reform in statistics, believed that the disease ought to be more prominently considered than the patient, who merely afforded the soil upon which the disease was sown. What was meant by a "relapse?"

Dr. HACK TUKE agreed with Dr. Blandford that statistics were more reliable in public than in private asylum practice. "Relapse" he had used to mean return to an asylum after having been discharged "recovered," as it was impossible to fix upon any particular limit in the statistical table.

A Plea for the Minute Study of Mania.—By J. CRICHTON BROWNE, M.D. London).

Dr. FERRIER (London) had listened to Dr. Browne's paper with much interest, it being the first attempt that had been made to correlate his experimental researches with the phenomena of insanity. He considered mania to be, perhaps, too difficult a subject to commence with in this line of inquiry, as so many of the movements in that disorder depended upon external irritation, as well as upon disease of the cortex.

Dr. HACK TUKE mentioned a case in which a man had sustained an injury to the right occipital lobe. He not only became insane, but there were involuntary movements of the left arm and leg, except when the attention was directed to them.

On Subvarieties of Neurasthenia.—By G. M. Beard, M.D. (New York). The paper was illustrated by a diagram on the black board, in which three circles of disease were represented: 1. Insanity (inside); 2. The borderland (central); and 3. Neurasthenia (outside); with which his paper had to deal.

The PRESIDENT expressed his opinion that the circles drawn by Dr. Beard should be subdivided into certain sections expressing neurasthenia, locomotor ataxy, and chorea.

Dr. HACK TUKE said that Dante's circles seemed to foreshadow the various degrees of mental horrors which we might witness on our planet. The facts showed how incomplete the evidence of mere statistics is, when studying the question of the increase of insanity, as persons on the borderland of insanity or affected with neutrasthenia, were not included.

sanity, or affected with neurasthenia, were not included.

Dr. Beard remarked that he and Dr. Browne were agreed as to the sections into which the circles should be divided, but that time prevented his entering into further details.

Case of Menstrual Epileptic Mania treated by Oöphorectomy.—By Lawson Tait, F.R.C.S. The case was that of a girl aged 17, an inmate of the Birmingham Borough Asylum, who had suffered all her menstrual life from severe menstrual epilepsy. Lately, this had assumed the additional character of acute mania at the periods. Dr. Green and Dr. Lyle, the superintendent and assistant-superintendent, were of opinion that oöphorectomy afforded a possible means of relief; and, for the purpose of having this operation performed, she was, with the consent of the Lunacy Commissioners, placed under the care of Mr. Lawson Tait. Her ovaries were removed, and proved to be perfectly healthy. The effect of the operation was an immediate and most marked improvement in her physical health, an entire arrest of the mania, and a diminution of the fits from fifteen in the month to three, with a marked amelioration of their severity. Mr. Tait thought further improvement was to be expected.

Dr. Bacon had castrated two male epileptics, with the result, in one case, of great improvement.

Dr. HACK TUKE asked under what conditions such an operation would be indicated?

Dr. Bacon replied, in cases of confirmed masturbation in incurable cases of epileptic insanity.

The PRESIDENT considered Mr. Tait's paper suggestive and illustrative of the importance of what he had long urged, an increased attention to the state of the sexual organs and functions in insane females. In various forms of insanity, the thorough investigation of these by a person having special skill ought to be a matter of routine practice. Surgical procedures such as those adopted by Mr. Lawson Tait and Dr. Bacon, ought only, of course, to be resorted to in extreme cases and with great cantion. He referred to a case, seen in consultation with Mr. Tait many years ago, in which a bearded lady had been benefited by the introduction of a galvanic pessary. The beard subsequently fell off, and the patient's mental condition, which was

that of melancholia, improved so that she recovered completely. He alluded to Dr. Sutherland's researches at the West Riding Asylum, which proved that menstrual irregularities were more common amongst the insane than the

Dr. BLANDFORD believed that the improvement from such operations would be temporary.

The following were taken as read:—

A Case of Multiple Apopleries Simulating General Paralysis in a Woman. By G. H. Sayaer, M.D. (Bethlem Hospital).

On the Necessity for a School of Medical Psychology in London. By J. CRICHTON BROWNE, M.D. (Edin.)

The Accommodation of the Insane in Workhouses. By T. M. Dolan, I.B.C.D. (Halisa)

L.R.C.P. (Halifax).

## SECTION OF PSYCHOLOGY.

#### DISCUSSION ON SLEEP AND HYPNOTISM

Mr. Braid appears likely to have justice done to him at last. Some years ago we pointed out the important bearing of hypnotism on mental disorders in this Journal, in an article entitled "Artificial Insanity." Subsequently, in 1872, the writer, in his work on the "Influence of the Mind upon the Body," insisted on the interest and influence of hypnotism in mental therapeutics. The progress of scientific truth, if certain, is rather slow. It has taken some forty years for the British Medical Association to repair the error then made in refusing to hear a paper by Mr. Braid on his discoveries, when it met at Manchester.—[D. H. T.]

Professor PREFER said he felt deeply honoured by the invitation which had

been given to him to open the discussion on sleep and hypnotism. In view of the extreme complexity and obscurity of both phenomena, and the diverse and contradictory views respecting them, he had found it impossible, on such an occasion as the present, to treat the physiology of the sleeping and the hypnotised brain as fully as it deserved to be treated. He deemed it advisable rather to indicate the problems which must be solved empirically, and to state what he considered to be new in his own researches into the causes of sleep and hypnotism, than to enter into a detailed description of the facts. Four years ago he published a theory of the cause of sleep, which was founded on the fact that natural sleep is the direct consequence of fatigue, whenever the conditions of the fatigued animal are such as to exclude all continuous and intense stimuli. According to the theory, there occurs, during muscular and cerebral activity, the formation and accumulation of certain substances, which hinder further activity by attracting to themselves the oxygen which, in the last instance, is necessary as well for the activity of the muscular fibre as for that of the nervous cell. Both these organs fail to execute their specific function if they are not supplied with oxygen by the red blood-corpuscles. To these noxious substances the term Ermudungsstoffe (fatigue-products) has been applied. They are easily oxidisable bodies; and, according to this theory, they accelerate the dissociation of the oxygen and hæmoglobin in the capillaries of the brain and muscles. Sleep then ensues, and the tissues which most depend upon a regular supply of oxygen, viz., the grey substance of the hemispheres and the muscles, are the first to be affected by the accumulation of Ermidungsstoffs. As soon as the oxidation process has reached a certain degree, the oxygen of the blood is no longer used up so quickly, and now even weak stimuli suffice to arouse into activity the nervous and muscular tissues; and the animal is awake once more. If this theory of sleep be true, the following two inferences should stand the test of experiment: 1. The artificial injection of the products of activity which accumulate during fatigue ought to XXVI.