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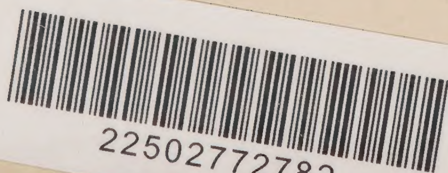

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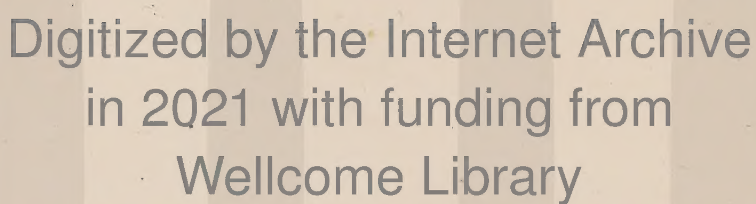
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EDITED BY

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"Nos vero intellectum longius a rebus non abstrahimus quam ut rerum imagines et radii (ut in sensu fit) coire possint."

FRANCIS BACON, *Proleg. Instaurat. Mag.*

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"In adopting our title of the *Journal of Mental Science, published by authority of the Medico-Psychological Association,* we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the terms, mental physiology, or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid, for although we do not eschew metaphysical discussion, the aim of this Journal is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health, or to produce mental disease, are not less questions of mental science in its practical, that is, in its sociological point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our Journal is not inaptly called the *Journal of Mental Science*, although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow men, may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science, with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study."—*J. C. Bucknill, M.D., F.R.S.*

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PART 1.—ORIGINAL ARTICLES.

Remarks on the Results of the Collective Record of the Causation of Insanity. By HERBERT C. MAJOR, M.D.

Read at the Quarterly Meeting of the Association held at Bethlem Hospital, Feb. 5th, 1884.

It will be well known to all to whom these remarks are addressed, that Statistical Tables of the Causes of Insanity in the Admissions into Asylums began to be collected by the English Commissioners in Lunacy for the first time in 1876. In that year returns upon a definite system and plan were asked for and received from all asylums throughout England and Wales, the results being published in the Commissioners' Blue Book for that year. In the following year, 1877, the corresponding statistics were not collected, but in 1878 they were resumed in a slightly modified form as regards the list of causative agencies from that originally issued, and, on the amended plan, they have since year by year been continued.

A passing word merely need here be bestowed on the constitution and plan of these tables, for their nature is probably only too well known to most of us. As regards the list of causes adopted, while doubtless it is not perfect, I think it may be considered as upon the whole a fairly comprehensive and satisfactory one, and certainly as not more open to criticism than any other classification as yet attempted. With respect to the working of the table, I would merely remark that the cardinal error, as I think it may be termed, of allowing only a single causative agency to a given case is avoided, and the opportunity of recording, when necessary, two causes per case is afforded. In the result, therefore, there is arrived at, not the number of cases accurately chargeable to a given

cause, but the proportion of cases which any given cause has contributed to produce—a form of result which, from the nature of the case, is maintained to be the only one reasonable and possible.

These tables, as compiled in our asylums for the insane, and collected and published by the Commissioners, having now been in operation for a series of six years, some review and comparison of the results shown in the several years would seem to offer a field of reasonable and perhaps profitable inquiry. Such review and comparison it will now be my endeavour briefly to institute.

Domestic Trouble (*including loss of relatives and friends*), stands first on the list of causes given. With regard to it, it is observed on comparing the results for the various years—

1. That in every instance this cause is represented as materially higher among the female as compared with the male admissions.

2. That the proportions for both sexes and the ratios of those proportions are maintained with striking uniformity in the several years.

Thus, the proportions in the six years over which the tabular record extends, run as follows:—

	M.	F.	
1876 ...	3·4 ...	9·2	per cent.
1878 ...	3·8 ...	9·8	,,
1879 ...	3·8 ...	9·5	,,
1880 ...	4·2 ...	9·1	,,
1881 ...	4·3 ...	10·1	,,
1882 ...	4·2 ...	10·3	,,

It follows also that the proportion for males and females (that is the total proportion) is very uniform. Thus, in the six years the total percentage runs year by year, 6·3—6·8—6·7—6·8—7·3—7·3.

And now, before going further, I would ask the most sceptical on the subject of these tables—and I desire to speak with all respect of such scepticism—to consider the fact just adduced—the invariably greater potency of the domestic trouble factor among the female admissions. Bearing in mind how these statistics are collected, without the possibility —not to speak of the probability—of collusion between those furnishing them, is he prepared to argue that the result is a mere coincidence having no significance? and if not, can he escape from the conclusion that it probably points to a definite

fact? And if a definite fact be demonstrated, will he refuse to accord to it some value for purposes of science? And if a fact of some value, may not other facts of equal or greater value be elicited by the same means, *i.e.*, these tables?

In the present instance it is possible that the experience of most of us has been in accordance with the result here indicated, but I am not aware of the fact having been before this clearly demonstrated statistically.

Taking the next cause on the list, *Adverse Circumstances (including Business Anxieties and Pecuniary Difficulties)*, I note that the result, as regards the two sexes, is directly contrary to that which obtained in the case of domestic trouble, the excess being invariably on the side of the male admissions. Thus, in the several years the proportions run:—

		M.		F.	
1876	...	6·4	...	3·3	per cent.
1878	...	7·2	...	3·2	,,
1879	...	8·3	...	3·6	,,
1880	...	7·9	...	3·3	,,
1881	...	8·8	...	3·3	,,
1882	...	9·2	...	4·0	,,

Mental Anxiety and Worry (from other sources than the two agencies previously dealt with) and Overwork, taken together, are, according to these tables, about equally potent in the two sexes; and I would merely further call attention to the similarity of the total results in the several years as follows:—

1876	...	5·3	total proportion	per cent.
1878	...	5·9	,,	,,
1879	...	6·2	,,	,,
1880	...	5·7	,,	,,
1881	...	5·7	,,	,,
1882	...	5·6	,,	,,

Religious Excitement.—This cause is shown in all the years as higher for females than males; in two of the years only very slightly so, but in the others with a decided disparity. This result is probably in accordance with the general experience. Total proportion per cent. from 2 to 3.

Love Affairs (including Seduction).—Here the preponderance is seen to be very decidedly and in every year on the side of the females, the proportion for males being uniformly low and insignificant.

Fright and Nervous Shock.—The results here show each

year an excess for the females, and this quite decisively, notwithstanding that, with respect to both sexes, the recorded proportion presents some degree of variation:—

		M.		F.	
1876	...	·7	...	1·9	per cent.
1878	...	1·2	...	2·0	„
1879	...	·9	...	1·5	„
1880	...	·7	...	1·9	„
1881	...	1·0	...	2·1	„
1882	...	·9	...	1·7	„

With respect to *Intemperance in Drink* I note in these tables:—

1. That in accordance with previous and general experience it is a much more frequent causative agent in men than in women.

2. That the proportion for either sex remains remarkably close in all the years, but that in 1880, 1881 and 1882 the proportions are slightly lower than in 1876, 1878 and 1879.

The foregoing facts will become apparent when I give the figures, thus:—

		M.		F.	
1876	...	22·7	...	7·3	per cent.
1878	...	21·3	...	7·9	„
1879	...	21·1	...	7·6	„
1880	...	19·3	...	6·5	„
1881	...	19·3	...	6·6	„
1882	...	19·6	...	6·8	„

With respect to the total proportion, varying from 13 to 14 per cent. according to these tables, it may be regarded by some as too low, and I am myself disposed to think that probably a more searching inquiry, speaking generally, would have made it higher. I would only further remark that inasmuch as these figures deal exclusively with alcoholic excess acting *directly*, it might perhaps be well to indicate the fact in the table. If this were done it might serve to avert the confusion liable to result from statements publicly made (and passing unchallenged) indicating a far higher proportion of cases chargeable to this agency than any shown by our statistics, by showing that in such statements the influence of alcoholic excess acting *indirectly* has been guessed at and included.

Sexual Excess is a small average proportion and is every year returned as higher for men than for women; and the

same remark applies to the next cause on the list, viz., *Venereal Disease.* With regard to both of these agencies many will probably decline to accept the estimate of their influence given, as indicating their full and real influence.

Self-abuse (*sexual*) shows a marked excess each year in the case of males. It is, however, noted as singular that in 1881 and 1882 the proportions referred to this agency show a fall from about 3 per cent. in the previous years to about 2 per cent. I am not able to account for this unless upon the supposition that, of late, the habit may have been more frequently regarded as a symptom or concomitant of mental disease rather than as the cause of the cerebral disorder.

Over-exertion (physical) yields a very small percentage of cases in both sexes and in all the years. I would venture to suggest the omission altogether of this as a supposed causative agency deserving of separate mention. Probably in these days more people break down from *under*, than *over*, bodily exertion.

Sunstroke yields a very uniform percentage in the several years of slightly over 2 per cent. in the male admissions; the proportion of female cases thus caused being hardly appreciable.

With regard to the cause *Accident or Injury* the proportion for males is each year about 5 per cent.; that for females being on the other hand about 1 per cent. only.

Taking *Pregnancy, Parturition and the Puerperal State*, and *Lactation* together—and as to the general advisability of such a conjunction I should be glad to elicit the opinion of others—these causes are observed to have contributed to produce each year from 9 to 10 per cent. of the female admissions; in the year 1880 only the proportion given being lower, viz., 8·2 per cent.

Privation and Starvation show each year an excess of influence on the side of the female admissions.

With respect to *Old Age* it is noted with interest that each year, without exception, the influence is recorded as greater for the female admissions, thus:—

		M.		F.	
*1878	...	3·5	...	4·1	per cent.
1879	...	3·3	...	4·5	,,
1880	...	3·1	...	4·3	,,
1881	...	3·6	...	4·1	,,
1882	...	3·7	...	4·3	,,

* In 1876 "Old Age" was given in combination with other causes.

I am not aware that previous statistics have pointed to the conclusion here indicated, and should this be the case the point would seem to be well worthy of careful scrutiny.

Other Bodily Diseases and Disorders give a proportion of from 9 to 11 per cent. in both sexes, a proportion so high that even with the result of expanding the list of causes slightly, I am disposed to suggest some indication of the diseases thus included as likely to afford useful information.

Previous Attacks are recorded in all the years under consideration as materially higher among the female admissions than among the male. An enumeration of the figures will, I think, show how clear appears to be the conclusion thus indicated:—

		M.		F.	
*1878	...	11·1	...	14·8	per cent.
1879	...	11·2	...	14·4	,,
1880	...	13·4	...	16·6	,,
1881	...	14·5	...	18·8	,,
1882	...	13·2	...	18·4	,,

With respect to *Hereditary Influence* it is noted that each year the proportion is given as highest for females; and the point would appear to be well worthy of attention even if, as may be admitted, all the percentages given are lower, probably, than more complete information would make them. The figures for the several years are:—

		M.		F.	
1876	...	14·1	...	17·1	per cent.
1878	...	16·3	...	18·8	,,
1879	...	17·3	...	20·2	,,
1880	..	19·6	...	21·0	,,
1881	...	18·2	...	21·2	,,
1882	...	18·6	...	21·8	,,

Upon the other hand *Congenital Defect* shows invariably a greater ratio for males than for females, a result in accordance, as I believe, with the previous conclusions of Boyd and others. The figures are:—

		M.		F.	
1876	...	6·7	...	4·1	per cent.
1878	...	5·9	...	3·7	,,
1879	...	4·8	...	3·5	,,
1880	...	5·4	...	3·5	,,
1881	...	5·3	...	3·3	,,
1882	...	5·4	...	3·3	,,

* "Previous Attacks" not given in 1876.

Mr. President and Gentlemen, within the limits of the time which I feel myself entitled to occupy, I am unable to prolong further my remarks, which, however, such as they are, may, it is hoped, be considered worthy of attention. The facts and figures adduced must be left to speak for themselves. Only, if the general feeling should be in accordance with my own, that we have in these collective results, at least, the "promise and potency" of reliable and useful knowledge, it may not be out of place if I urge that it behoves us to give increasing diligence, care and labour to the collection of the facts upon which these tables are founded, as a matter of serious obligation. If in such a spirit the causes of insanity in our cases are sought after and recorded by us I, for one, shall have no fear for the result. Gradually our previous deductions will be confirmed, corrected or modified; our conclusions will go on increasing in reliableness and value; and, perhaps, in time our reproach in this matter, for such I have long considered it to be, may be blotted out.

The Data of Alienism. By Charles Mercier, M.B.

IV.

The Bodily Health.

At a time when Insanity is commonly looked on as a bodily disease; when the only aspect of it that receives systematic study is that of disturbed bodily function; when a leading neurologist speaks of the mind as "a force evolved from the brain;" when the main difficulty in the exposition of the facts of insanity lies in procuring an acknowledgment that there is anything besides the bodily health to be studied; little insistence need be laid on the importance of a systematic and methodical examination of the condition of the bodily functions in cases of Insanity.

Not every aberration of bodily function, however, has a significance for the alienist. The existence of an epithelioma of the lip, of a broken arm, a contracted cardiac valve or orifice, of a hernia, an aneurism, or a local inflammation, has, or may have, no bearing whatever on the question of the sanity of the person in whom it occurs, and may be altogether left out of consideration in studying that question. So that, however thorough and searching may be the schemes that physicians have drawn up for the investigation of the bodily

functions from their point of view and for their purposes, it by no means follows that those schemes will be suitable for the investigation of cases of insanity. Nay, by reason of their thoroughness, they must be, to a large extent, unsuitable, since, the more comprehensive they are, the more numerous will be the facts that do not concern the question of sanity that they include.

On the other hand, there are many facts of bodily functions which, since they give indications more or less direct of the physical and physiological activity of the highest nerve-centres, have a very important significance for the alienist, and yet have but little attention bestowed on them by physicians, to whom, indeed, they are of subordinate interest and importance. Such considerations are the precise origin, march, and character of an epileptic paroxysm, and the nature of the actions that follow it. Moreover, of the signs and symptoms of bodily disorder which concern both the physician and the alienist, many have very different meanings, according as they are seen from the point of view of the one or from that of the other. A chilblain, for instance, is to the physician a trifling matter. He looks on it as a source of discomfort, perhaps of actual pain; but since it involves no danger to life or limb, and very rarely incapacitates from employment, it attracts but a very small share of his notice. Even if he takes it as an indication of debility or, "low vitality," he does not need to greatly concern himself about it. In short, a chilblain on a patient's limb, a simple chilblain is to him, and it is nothing more. But when an alienist has to treat a person of weak mind, and finds her hands a mass of chilblains, he has obtained a fact of the utmost significance. This observation is in the forefront of the data whence he derives his prognosis, which is now many degrees less favourable than it would otherwise have been. Conversely, when a physician is consulted by a patient who has defect of speech and weakness of the right arm and leg, he is confronted by a malady of great gravity—one which will tax all his resources to investigate, and all his skill to treat; but to the alienist this group of symptoms has no special significance. Its meaning to him is that the patient has suffered damage of certain of his instruments for acting; but his defect of speech does not necessarily mean a disorder of the process of adjusting himself to his environment, any more than his defect of movement of arm or leg means such disorder. All it signifies is that he has lost

certain means and methods of carrying out the adjustment.

It is, of course, true that in the great majority of cases an alienist acts as a physician also; but the two sets of duties are no more on that account the same than the duties of Prime Minister and Chancellor of the Exchequer are the same because they were recently discharged by the same individual. The kinds of work of the two departments are not only distinct, but must be clearly distinguished and kept apart if either is to be properly done. It is true that the existence of insanity, if it do not actually produce, certainly does not prevent the occurrence, in the person so affected, of the various bodily ills the flesh is heir to. The lunatic is "fed with the same food, hurt with the same weapons, subject to the same diseases, healed by the same means, warmed and cooled by the same summer and winter," as a sane person; and these bodily affections it commonly falls to the alienist to treat. But their investigation and treatment form no part of his special function. He treats them, not because he is an alienist, but because he happens to be a physician as well. And although these bodily affections in many cases do not run precisely the same course, and are not attended by precisely the same manifestations as commonly occur in the sane—although the lunatic, as Dr. Bucknill says, is a lunatic to his fingers' ends, and, as Mr. Darwin says, to the extremity of each particular hair—although disorder of the highest nervous processes affects the nutrition, and therefore the function, of every portion of the body—yet in estimating these bodily functions, with a view to their rectification, the condition of the highest nervous processes is considered not *per se*, but as an extrinsic disturbing influence, just as the climatic conditions, or the sequelæ of a former disease might be taken into account. It is considered, in short, from the point of view of the physician, not from that of the alienist. Only when we deal with the question—What is the influence of this bodily state on the highest nervous processes? or with the other question—What condition of the highest nervous processes does this bodily symptom indicate? are we dealing with the problems of alienism.

From the foregoing considerations, it appears that variations of the bodily functions have a significance to the alienist very different from that which they have to the physician; but the importance of a given variation in the estimation of the former bears no relation to its importance in the estimation of the latter; and that a scheme of investi-

gation which is adapted to the requirements of the one, must for that very reason fail to satisfy the requirements of the other. For the just estimation of the facts of bodily function, and for their relegation to an appropriate position among the data of alienism, it is necessary therefore to formulate a scheme of investigation different from that of the physician, and having reference to the special end in view.

From a purely physical aspect, the organism is an apparatus which absorbs and distributes matter and force; and its functions admit of a broad and sweeping division according as they subserve the redistribution of matter or the redistribution of force. While it is, of course, true that the rearrangement of matter is always effected by the redistribution of force, and that the redistribution of force is always accompanied by the rearrangement of matter, and that these conditions are as inseparably linked within the organism as without it; yet, since one portion of this duplex process is in every case primary while the other is merely subsidiary, the distinction between the two is thoroughly valid. That this division of the functions follows an actual line of cleavage which penetrates to the very foundation of the constitution of the organism, is indicated not more by *a priori* considerations than by the multitude and importance of the minor lines of difference that it passes through, coincides with, and connects; and of the complementary factors that it refers to the one side and the other. The functions which subserve the reception and redistribution of matter are those by which the organism exists, while the functions which subserve the reception and redistribution of force are those by which it acts. The first are the so-called vegetative functions; the second are those which are more conspicuously indicative of animal life. The continuance of the first are essential to the continuance of life. Stop the heart, and the man drops dead; arrest the breathing, and he dies rapidly; abolish the function of the kidney—block the intestine—and he has but a few days to live. But the functions of the second group may be abolished *seriatim* without directly or necessarily affecting the duration of life. Blindness or deafness is no bar to longevity. Many a paraplegic lives to advanced life, and if his malady is fatal, it is so not because of the loss of movement, but because of the nutritive changes that accompany the loss. So with hemiplegia, with tabes, with muscular atrophy, with chorea, and with all other dis-

orders of movement, life is not threatened except by the concomitant changes of nutrition or by the invasion of the functions of the first order. Again, the redistribution of matter is continuous; the redistribution of force is intermittent. The blood never ceases to circulate; the interchange of gases in the lungs is never interrupted; the structural changes of growth and development, waste and repair, nutrition, excretion and assimilation, are continually going on. In sleep and in waking, in activity and in repose, day and night, year after year, the structure changes ceaselessly. In life these changes never cease, and when life ends they merge without a break into the final redistribution that takes place after death. But the redistributions of force are not continuous; they occur only at intervals. In the separate pulsations of the heart, in the composition of a muscular contraction, in the to and fro movements of breathing, in the undulations of peristalsis, in the fatigue and repose that follow exertion, in the sleep that alternates with waking life, we see exemplified the irrefragable law that within the organism the redistribution of force is always intermittent—conforms always to that greater law which asserts throughout the universe of Space and Time the rhythm of all motion. Yet, again, while the redistribution of force is the primary function of the highest nervous centres, the redistribution of matter is altogether independent of their direct control. Which of us by taking thought can add a cubit to his stature? or determine the deposition of fat in this place or the absorption of fluid from that? Who can check the proliferation of cells which is forming a cancer in this part, or keep up to the normal standard the defective nutrition which is resulting in atrophy in that? On the other hand not only are the redistributions of force which affect the outward movements of the organism under the control of these centres; not only are the movements of locomotion, handicraft, and speech the direct outcome of their activity, but even the redistributions of force which subserve those of matter—the movements of the digestive, respiratory, and circulatory apparatus—are more or less under their direct control. Differences so pervading and so fundamental fully justify the division of the functions into these two orders.

As the organism must exist before it can act—as in the course of our investigation we have found it necessary to consider it as existing at rest before considering the actions and reactions between it and the environment—an obvious

extension of the same principle will render advisable the consideration of the functions by which it exists as a preliminary to the consideration of those by which it acts. Insomuch as the great statical functions with which the investigation begins, and by virtue of which the organism exists, underlie and are presupposed by the dynamical functions—since the functions of the first class are the most general of all the functions, while the highest nervous processes, in which the dynamical functions culminate, and with which the inquiry terminates, are the most highly special of all the functions, it will tend to preserve the continuity of thought if all the bodily processes are considered in the order of decreasing generality and increasing speciality. By this means we obtain a concept based on the widest foundation and gradually attaining the highest precision. Moreover, in the detailed investigation of separate organs a further application of the principle stated will involve the expediency of considering the statical aspect before the dynamical, of estimating first the structure and then the function.

Although absent at the dawn of life, and preceded by several other tissues, both in the primitive living forms from which man traces his long line of descent, and in the development of the individual germ; yet in man the most general, the least differentiated, of all the tissues is unquestionably the Blood. It may be regarded as potentially holding every tissue in solution, since molecule by molecule they fall into its current and are swept away, and at the same time they are continuously reconstructed out of the material that it supplies. To the alienist its condition is important, not only because the nutrition of the highest nervous centres, which is the proximate end of his investigations, depends on its wealth in appropriate materials, but because the presence of certain substances in the blood passing through the brain directly produces alienation. Variations in the composition of the blood may for our purposes be said to be of two kinds—one in which some normal component of the blood is deficient in quantity; the other in which there is either an excessive quantity of some normal component or there is added some altogether foreign material. If there is deficiency in the blood of a normal component, then all the tissues to whose nutrition that component contributes must be imperfectly nourished, and if imperfectly nourished, must work inefficiently. In every case in which such a state of blood exists, the nervous centres will suffer a

lack of nutrition, and will display this lack by imperfect function. Hence we find that in chlorosis, in oligocythæmia, in aglobulism, in anæmia, there is always under-activity. The total movement of the organism is less than normal, showing general defect of nervous discharge. Corresponding with this bodily symptom there is the Feeling of languor, and on the intellectual side of Mind there is that slight degree of hebetude which shows itself in sluggishness and defective range of thought. Such people are dull; they "take no interest in things;" their attention is not aroused quite so readily as is normal, nor maintained quite so long; they are "apathetic." When you find them sitting lumpishly, staring before them with a vacant expression, and ask them of what they are thinking, they rouse up and answer, "Nothing," and this is no doubt approximately true. Now what is the meaning of all this? What general condition of Mind does it indicate? *It means that consciousness is defective;* that mental states and processes are less vivid than normal; that the tide of feeling is at its ebb; that there is a slight degree of what, if carried to the full extent, would be loss of consciousness. Then if a certain lack of these components in the blood bathing the highest nervous centres is attended by defects of consciousness, with a greater deficiency of them, consciousness will be altogether lost? Certainly it will. If the movement of the blood be arrested, so that no more supplies arrive to take the place of that which has been emptied of its pabulum, consciousness will cease; and we know that in syncope consciousness does cease. Hence it is, in a rigorous scientific sense, as literally true to say that an anæmic person is to a certain extent alienated as it is to say that when I move my hand to my head I shift the centre of gravity of the earth. The immediate practical consequences of the aberration are certainly not very much more important in the one case than in the other, but the value of a fact to science and to humanity does not depend on the magnitude of its immediate practical consequences. The discovery of the Law of Gravitation did not, as far as we know, cause much excitement among the farmers of the seventeenth century, nor much rejoicing among the proletariat; yet, apart from its value as pure knowledge, it has taken an important part, through the improvements in navigation that have been effected by its means, in bringing a cheap loaf to the door of every cottager in the kingdom. The view of disease that regarded it as a separate entity that jumped into a man

from outside, has become extinct, together with the belief in other demoniacal manifestations. We now know that among the variations of the processes of life there are no differences in kind. All the processes of disease are but deviations in degree from the processes of health. Every disorder has its physiological counterpart, of which it is an exaggeration. There is nothing new under the skin.* If, then, we would discover the how and the why of this disorder, shall we best do so by confining our attention to the full-blown malady, or shall we trace its manifestations backwards to the point at which the first trivial deviation from the normal can be recognised? If we would discover the source of a river, whether is it better to sit down and watch the broad stream rolling past us, guessing at its origin from the *débris* that it throws up at our feet, or to follow it up to where its remotest tributary trickles from the rocks? If we want to discover the mode in which a plant developes, shall we carefully root out and discard the seedlings, and confine our attention to the full-grown tree? Surely not. What would be thought of a farmer who spent abundance of time, money, and trouble in extirpating a phylloxera or a Colorado beetle, but refused to concern himself about the eggs, because they were so little, and did no harm? Would he not be thought a fit person to occupy our attention? Why, then, should we regard every trivial defect of consciousness, every temporary aberration of conduct, every form of delirium, every case of drunkenness, every occurrence of vertigo, every "absence of mind," every temporary listlessness or irritability, or despondency as an affair with which the alienist has no concern? Should we not rather study these things with special care, as the biologist studies the amœba, because they show in the simplest and most easily analysed form those phenomena which are elsewhere presented in such inextricable complexity? But the trivial alienation of anæmia goes no further—never developes into actual insanity or dementia? No, nor does the free amœba develope into a vertebrate. In the one case as in the other, the process of development stops short at an early stage, and presents for our study a *permanent larval form.* It is not too much to say that it is of far more importance to study such nascent and intermediate forms than to study the phenomena in

* Without desiring to claim a shred of priority for this doctrine, it is only fair to say that the whole of this article was written, and in the hands of the Editors of the Journal, several months before Dr. Creighton's admirable Address in Pathology was published.

their full development. If biologists had rejected the study of invertebrate animals as unimportant, we should not now know much about the development of vertebrates; and when alienists speak of the difficulty of the study of insanity after having laboriously framed their definitions so as to exclude these larval forms of alienation, they are in the position of men who have wilfully blocked up their windows and then complain of want of light.

In the various forms of anæmia, then, we are confronted with a derangement of the function of the highest nervous centres which is not only very slight in degree, but which is the simplest possible form of derangement—a pure deficiency of action.

The presence of abnormal materials, or of abnormal quantities of normal materials, in the blood bathing the highest nervous centres, gives rise to aberrations of a different, and commonly of a much more prominent character. Among the foreign materials that occasionally gain access by means of the blood to the elements of the central nervous system, are lead, mercury, arsenic, and other metals, opium, belladonna, stramonium, and other vegetable products; alcohol and its allies; chloroform and ether; the poisons of the specific fevers, of malaria, of hydrophobia, and perhaps of tetanus. Among the normal constituents of the blood whose presence in abnormal quantity may disorder the action of the highest nervous centres, are carbonic acid, the poisons of gout and of uræmia, whatever they may be; sugar, cholesterine, and perhaps other waste products.

The manifestations of the action of alcohol and of anæsthetics upon the organism are of enormous importance to the study of insanity, since by them we can artificially produce alienation of any degree, from a trifling confusion of thought and unsteadiness of hand, through the various stages of maniacal excitement, to the profoundest coma, with total loss of consciousness and of voluntary movement, or even to complete ablation of the functions of the nervous system in death. There is no form of mania that occurs among the inmates of lunatic asylums that may not be exhibited by a drunken man. Violent, destructive, amorous, maudlin, dolorous, lachrymose, or what not; subject to illusion, hallucination, delusion, imbecility, whatever disorder of Feeling, Intellect, or Conduct can be discovered in a lunatic, has its counterpart, allowing for individual differences, in some cases of drunkenness. And the stertorous coma into which the drunkard at last subsides is identical

in form with the coma which marks the closing stage of a fatal maniacal attack. This being so, it is astonishing that the occurrences in drunkenness have not of late years been scientifically investigated, and it behoves the students of insanity to bestir themselves betimes, before all opportunity for this most important study is abolished by Sir Wilfrid Lawson and his disciples. Just as, by the uniform character of the delirium produced by belladonna, we are shown that the same substance acts similarly on the nerve centres of different people,; so by the multiformity of the symptoms that follow the ingestion of the same amount of alcohol by different people we see the share taken by the inherent disposition of a man in determining what form, if he becomes insane, his insanity shall assume.

Delirium, which is, of course, a form of alienation, although from its transient duration and assignable cause it is not clinically considered as insanity, is common in the course of the specific fevers. When it occurs at the climax of the fever, it may be due to the high temperature; and when it occurs toward the end, it may be considered due to the waste of the highest nervous centres concurrent with the general waste; but when it occurs at the outset of the malady, it can have no other cause than the presence of the poison in the blood and the action of this poison on the brain. It is a very noteworthy fact that the invasion of the organism by a specific poison is usually announced by the excessive discharge of some nervous centre or group of centres. Ordinarily the vaso-motor and its allies are the centres affected, and their discharge produces directly the contraction of the vessels, dilation of the pupils, erection of the hair follicles (cutis anserina), and indirectly the lividity, the shivering and the feeling of cold that together constitute a rigor. Often, and especially in children, the discharge proceeds from a group of motor centres, and the effect is a convulsion. Sometimes the centres discharged are the highest of all, and the manifestations, direct and indirect, of this discharge constitute mania. I have notes of a case of typhoid fever which was for some days regarded as a case of insanity, the earliest observed occurrences being extremely vivid and persistent hallucinations, culminating in acute delirious mania.

(*To be Continued.*)

Constant Watching of Suicidal Cases. By G. H. Savage, M.D.

Read at the Quarterly Meeting of the Medico-Psychological Association, held at Bethlem Hospital, Feb. 5, 1884.

The feeling of the sacredness of human life, which springs from the selfish feeling of the sacredness of the life of each person to himself, has extended in many directions, so that the murderer's life is often spared, and the suicide is considered as not responsible for his acts.

The public is in England greatly affected by a suicide, and most people dread insanity more from its connection with self-murder than from anything else.

The ordinary Englishman cannot be convinced that a sane man can kill himself.

The public and the Commissioners look to the officers of asylums to prevent suicides as one of their most serious duties, and, I fancy, an unlucky Superintendent who had a series of suicides would not escape blame.

It becomes a very serious consideration how suicides are best avoided, but above all I would say that, in my opinion, this consideration should be secondary to the cure of curable cases.

I have taken up the subject because I believe it to be a thoroughly practical one, and one which can be decided by the experience of those present.

The Commissioners are, I believe, equally anxious to get to the opinion of the Superintendents, though they have very strong opinions on the necessity of constant supervision.

First, I shall discuss cases which are to be considered as actively suicidal, and for whom such provision is to be made. Yearly, in Bethlem, we have from 20 to 30 per cent. of our patients described on admission as suicidal, and if these have all to be placed under constant inspection, the hospital must cease to exist as one in which patients have separate rooms, and are treated in a home-like way. But the above numbers are misleading, for though many speak of suicide, but few really determine to attempt it.

I do not think that more than five per cent. of our admissions are "actively suicidal," that is, patients who have made serious attempts on their lives, and are likely to repeat them.

I should say patients with hallucinations of hearing are among the most dangerous; those who are persecuted, injured, &c., or who hear their relations being tortured; those with profound mental misery, even with few or no delusions, may be equally dangerous patients. Young women who feel themselves to be "unnatural," are always regarded with suspicion. "Miserable sinners" are more dangerous than hypochondriacal cases, unless the latter be suffering from sexual hypochondriasis.

I should consider the above classes as most dangerous; but I do not think they should all be treated alike. The "persecuted" man is generally more at peace if in a room by himself; and I have one man who is very suicidal, who would certainly attempt to murder the night attendant or any patient who coughed, or moaned, or even moved at night, because he would consider the action was done to annoy him.

The patients who have attempted suicide, and who come of a suicidal stock, are above all the worst; but their only safety is to get relief from the thought of suicide, and I maintain this is best done, though with some risk, in single rooms. Again, the girls who are unnatural are just of that plastic type which will be made more and more suicidal by association with others. They are as bad as the hysterical mimic, who will become hystero-epileptic in an epileptic hospital.

Other suicidal cases may belong to any one of the forms of insanity from the general paralytic, who kills himself to prove his immortality, to the sensitive woman who destroys herself as she is awaking to reason after a storm of mania, horrified by the thought of her faintly-remembered past, and by her presence in an asylum. I maintain no one can avoid suicides at all times unless he destroys all privacy, and makes the wards of asylums barracks with night-patrols.

What is Constant Watching ?—The only real method is in associated dormitories, and here I can foresee danger in having but one attendant.

It has been suggested that there should be inspection slits or holes in the doors so that the night-watch can see as he passes how the patients are without disturbing them.

I have suggested that part of a gallery should have the doors taken off, and the patients be allowed to sleep in the doorless rooms while the attendant walks about the ward. In this way there would be less irritation, but, of course, not

quite the same amount of security as in the open dormitory plan.

It may be said that after all there is little, if any, more irritation to a patient in an open dormitory than in a room the door of which is hourly opened; and I should like to have the opinion of members on the subject.

Can anyone suggest other plans?

What are the Special Benefits of Constant Watching?—Is it for the patients' good? I should emphatically say No. Patients have repeatedly told me that when constantly watched they felt as if they were being dared to do a thing, and naturally set themselves to evade their tormentors. A perfect attendant does not irritate a patient, perhaps, but I have not found one yet.

There is, doubtless, a feeling of security to the Superintendent when he knows that certain very anxious cases are secured, but if he has his heart in his work, he will have much greater pleasure in thinking the same patient is placed more favourably for recovery, though with more risk to himself, in a single room.

The public will be better pleased with fewer suicides in asylums, it is said.

I fear I do not care what the public think about it, as they are certainly the least fit to judge collectively of the good of the insane, for they are ever ready to cry "Away with him" on impulse, and, again, to consider him unjustly imprisoned where he is best cared for.

My own opinion is that, as a general rule, the constant watching of actively suicidal cases is not for the good of the patients.

In practice, when a patient is admitted with "suicidal" to his name, I put him for a few nights in strong clothes and strong sheets in a single room. I examine him and decide whether this is necessary, and very often accept the statement of the patient that he will exercise self-control. By encouraging self-reliance the patient very generally gets well, and I believe this would not so often be the result if he were not trusted.

We all know how, from time to time, "cured" cases kill themselves later, but this must continue as long as disease is likely to recur.

Some risk *must* be run if good is to result, and we must be considerate to each other when accidents do happen.

Rectal Feeding and Medication. By Wm. Julius Mickle, M.D.

Read at the Quarterly Meeting of the Medico-Psychological Association, held at Bethlem Hospital, October 26, 1883.

Rectal Feeding.

In reading a paper on rectal feeding and medication I am not desirous of unduly extolling that form of alimentation and treatment, or of substituting it for the more direct, usual and natural methods, where the latter are feasible and effective. Deprecating any misunderstanding on that point, I speak in the first place of the principal conditions in which rectal feeding may prove useful in asylum-practice. These I will speak of in groups of diseases, or of cases, loosely bound together, for the nonce, by the tie of suitability for the use of nutritive enemata.

One group consists of cases such as cut-throat, inflammation of throat from the swallowing of caustic substances (as a case under Dr. Pringle), diphtheria or diphtheritic paralysis of throat, severe stomatitis or quinsy, post-pharyngeal abscess. Or, again, where the œsophagus is compressed, or cancerous, or strictured, or in spasm made worse by attempts to swallow or to pass a tube. Or laryngeal phthisis or syphilitic laryngeal stenosis with extreme dysphagia may call for rectal feeding.

Another group consists of gastric and abdominal affections often associated with vomiting, severe pain on eating, and so forth; affections such as cancer, ulcer, atrophy, or severe catarrh of stomach; or dilatation of stomach with other coexisting conditions; or extreme dyspepsia and irritability of stomach; or obstinate vomiting with ovarian disease or with hysteria; some cases of obstruction, ulceration, or hæmorrhage of small intestine; tabes mesenterica; peritonitis; renal calculus with reflex gastralgia and emesis.

Still another group consists of cases where nutritive rectal injections are given in such affections as the anæmias, neuralgia, phthisis, or to supplement the stomach's work where there is either general or digestive weakness.

But I would speak more especially of cases such as insanity with refusal of food, if, and when, the passage of an œsophageal tube causes vomiting or severe dyspnœa; or such as tetanus; or excessively frequent and numerous true

epileptic convulsions, or epileptiform convulsions; or coma, stupor, and apoplectiform symptoms. It is perhaps in these latter we most often find rectal feeding useful in lunacy practice. Of these the most frequently suitable are severe and protracted or quickly recurring epileptiform and apoplectiform seizures in general paralysis, in various states of sclerosis, and with local cerebral hæmorrhages or softenings, or with their histological sequelæ. In some cases of these and analogous kinds the use of the stomach-tube causes vomiting, or gives rise to severe dyspnœa and threatened asphyxia; in others there is vomiting independently of the passing of any tube. Here the use of the stomach-tube introduces an element of danger; the patient, helpless, in stupor or comatose, paralysed, or convulsed, or locally anæsthetic, as he may be according to the circumstances in each case, and eructating or vomiting ineffectually the incoming food, is apt to inhale portions of it into the lungs; by strong inspirations the inhaled food is drawn into the far-distant ramifications of the bronchi and into the alveoli; and a destructive, traumatic, form of lobular pneumonia ensues. Nor is it absolutely impossible in some of these cases that the tube may be passed into the air-passages themselves; or that, doubled up in the pharynx and œsophagus, the tube may allow the food to find exit in such manner as to force its way into the trachea. In a manner, the parts are passive and helpless, the janitor at the glottis is not on the alert, effectual cough is not roused, and the intruding food is not ejected by an expulsive blast of air and a preservative effort.

Lastly, there are not a few patients who refuse food and resist feeding when, by reason of their diseased state of brain, heart, or lung, efforts and straining against the stomach-tube endanger life.

Therefore is rectal feeding appropriate in cases of these kinds, when not only is food refused, or the swallowing of it unsafe and inefficient, but also the stomach-tube excites vomiting or suffocative spasm, or the food regurgitates with danger of entering the air-passages, or vomiting and severe gastric symptoms pre-exist, or the patient's resistance endangers life. If the tube *can* be passed, and this course is judicious, good and well;—if the patient *can* swallow, so much the better;—let the tube be passed, let the patient swallow. But failing these make use of rectal feeding.

There are several points of management desirable to bear in mind.

In using nutritive enemata :—

Alcohol should not be added to albuminous food.

If necessary, the bowels should previously be cleared out by a simple or aperient clyster, and a daily copious cleansing clyster is required in some instances.

The bowels may have to be rested, but we must persevere if the first attempt fails.

Where it is apt to return, the patient's best position to receive the enema is on the back or left side. The nozzle or tube should be comfortably warm, so should the food injected.

The amount injected may sometimes with advantage be small at first, gradually increasing from 2 to 10 ozs.

If the foods are ejected we may try Dr. Hime's plan of depositing them higher up in the viscus by means of elastic tubing and a funnel.

But plugging the anus is often necessary, and has been done in many of my cases. Mr. H. H. Newington has referred to the value of plugging, in the Journal of this Association.

Then as to the kind of food for use *per anum*, and the methods of preparing it.

Having decided to feed by rectum, the question arises, what form shall the injection take, and to what preparation (if any) shall it previously be submitted?

Many adhere to the older plan, and still use enemata of food (and stimulants) not specially prepared, such as ordinary milk, beef-tea, and brandy.

Conflicting as are the results of experiments on the subject I nevertheless conclude that the rectum and colon digest but little, and that, even when inverse peristole is set up, the action of the bowel upon enemata is chiefly absorptive. If so, the food should either be introduced mixed with digestive substances, or else before administration should in some way or in some measure be digested, and ready for absorption into the venules and lymphatics of the intestinal walls.

Several methods have been devised to attain these objects.

For example, Dr. Leube gives three parts of meat with one part of pancreas, both finely minced, and mixed with a sufficiency of warm water for clysis. He avoids a greater proportion of fat than one-sixth. Others, however, using this plan, carefully remove all fat and connective tissue. For this method the hog's pancreas is the favourite.

Surgeon Rennie directs as follows :—Into a basin of good

beef-tea put : ½lb. shredded lean raw beef; ʒi fresh pepsina porci; ʒß dil. hydrochloric acid; warm on the hob for four hours, stirring frequently. Beaten egg or alcohol may be added, he says.

Dr. Dobell's formula (Dr. Sansom says) is:—Cooked, finely grated beef or mutton, 1lb. Pancreatic emulsion (Savory and Moore), 1oz. Pancreatic powder, 20 grs. Pepsine (pig's), 20 grs. Mix the whole quickly in a warm mortar, add half an ounce of brandy, and warm water sufficient to bring to the consistence of treacle, inject quickly from an elastic enema bottle.

For enema, M. Catillon recommends:—A saturated solution at 19°C. of peptone of meat 40 grammes. Water 125 grammes. Laudanum 3 to 4 drops. Bicarb. of soda 3 centigrammes.

M. Henninger gives a complicated formula. Omitting quantities, the following is an abstract of his process. Very lean meat, finely minced, is placed in a glass receiver; water and H.Cl. are poured on, and pepsine, at the maximum of its activity, is added. The whole is left in a water-bath or stove to digest for 24 hours at 113°F.; it is then decanted into a porcelain capsule, brought to boiling point, and whilst the liquid boils a sol. of sod. carb. is added to it until it shows a very slight alkaline reaction. Then the boiling liquid is passed through a fine linen cloth. The liquid is reduced in bulk in a water bath. White sugar is added before administration.

Benger prepared an artificially digested meat by a pancreatic method; finally evaporating it to the consistency of a solid extract; and Darby sold a fluid meat, artificially digested by a process apparently not made known (Roberts).

Nutrient suppositories have been made, as by the Slingers of York, and consist more or less of pure peptones.

Dr. Wm. Roberts, in a very few lines in his Lumleian Lectures, recommends the adding of liq. pancreaticus to milk-gruel and beef-tea immediately before they are injected into the bowel, thus leaving the ferments to act on the food when within the rectum.

In actual practice I have departed considerably from this plan of Dr. Roberts, preferring to inject food in the already peptonized form and ready to pass from the bowel by absorption. Therefore, for enemata, I have used, in a slightly modified form, his method of preparing the food as if for administration by mouth. Thus the enemata I have

employed were prepared as follows; and it will suffice to mention the mode of preparing milk, as being the simplest, and a type of all.

A thermometer being employed throughout, and either kept in the liquid or frequently introduced to test the temperature, a pint of milk, with $\frac{1}{5}$ or $\frac{1}{4}$ pint of water, is carefully heated in a clean dish to 140°F. At that temperature two drachms of Benger's liquor pancreaticus are added, and twenty grains of bicarbonate of soda dissolved in one or two ounces of water. The whole is put into a covered jug or dish, and kept near a fire for from an hour to an hour and a half, and still kept constantly at a temperature of 140°F. At the end of that time it must be thoroughly boiled for two or three minutes. Each step should be carefully carried out, to secure success. Thus prepared, the food keeps for half a day or a day. For convenience the process is given as for one pint of milk, but multiples of that measure may be made ready. Various modifications of this plan are employed in preparing foods other than milk, but there is not time to speak of them here.

These enemata offer advantages not at present surpassed, I think, unless possibly by those of defibrinated blood, or of a solution of desiccated blood; a method of feeding which has come to us from America.

I avoid mention of the administration of peptonized food by mouth; that is entirely outside the scope of my paper. But I will now briefly refer to cases which, I think, fairly illustrate the employment of peptonized enemata. The limits of space, and of our time, demand that these cases merely be limned by a few strokes. No full clinical description can be set forth, no minute details of treatment can be inserted.

I.—Æt. 49, of large and heavy frame. Epileptic attacks had been followed by strange and violent behaviour, suspicion, rambling conversation, and dirty habits. He had scarcely taken any food for a while before admission; and was carried in helpless, shouting out occasionally, and soon passing in a condition of stupor and then of coma, with palsy of right face and arm, some rigidity of the latter, and twitches of left leg. The pupils were contracted, the respiration was stertorous, he was unable to swallow. Next day and afterwards he was aphasic and locally paralysed, confused, restless, urgently resisting being fed or tended in any way. I need not describe the treatment in detail, or the course of his recovery, but distinct benefit resulted from the use, every two hours, of Oß of peptonized milk for

several days, the first being given after the bowels had been relieved by an aperient clyster.

II.—Admitted at the age of 50, thin, feeble, and with advanced pulmonary phthisis, was seized with violent convulsions soon (hours) after admission, and lay subsequently in a state of profound coma and generalized muscular weakness. Peptonized milk was given by the rectum each second hour for some days, and the patient was tided over the difficulty without losing ground, and without incurring the risk of damage to his already much diseased lungs, or of further limitation of the already embarrassed respiratory function.

III.—Aged 26, suffered from a severe and protracted attack of diarrhœa. When this subsided, symptoms of pleurisy, with effusion came on, some pulmonitis, refusal of food, dry, brown tongue, obstinate vomiting. Treatment was successful, and parts of it consisted of rectal administration of peptonized food, and the aspiration of the left chest, once to 80ozs. of sero-fibrinous effusion, and again to the amount of 30ozs.

IV.—Aged 35, severe protracted diarrhœa ; phthisis, with mucopurulent and sanguineous expectoration. Next, severe and obstinate vomiting, feeble pulse, coldness of surface and limbs. Later, with vomiting of thin greenish fluid, and the passing of loose fœtid stools, there were a shrunken, sunken, livid face, and a cold surface, aphthous tongue and mouth, and a parotid abscess. Yet he pulled through, and lasted some weeks longer, under treatment I need not detail, except that peptonized food was diligently administered by enema every two hours, in quantities varying from 10 to 3ozs., thus supplementing the food and the stimulants retainable in very small quantities only, and occasionally, by the stomach ; while hot-bottles afforded constant warmth to the surface.

Some atrophy of brain and of olfactory bulbs and tracts, some softening of central parts. Some caseous changes in the lungs, and lobular pneumonia ; and in the left lung a semi-gangrenous patch, as also local pulmonary collapse. Heart flabby, friable. Embolic, ashen-grey patches in kidneys. Liver yellowish. Small intestine pale, walls thin, contained a little ochre-hued fluid material. In the large gut a few patches of redness.

V.—Æt. 36, general paralysis for about seven years, recurring epileptiform convulsions during the greater part of that time. Towards the last these convulsions became more severe and frequent ; they were associated at one time with right hemiparesis, but later with palsy, generalised, but more marked on the left side, and insensitive conjunctivæ. Eventually, the status epilepticus was fully established, and what with this, and the large unwieldy frame of my patient, and his coma and inability to swallow safely, I was glad to be able to keep up a constant supply of nourishment by peptonized food enemata, which were plugged into the rectum. This organ, however, had already served him well before. For, so long as four and a

half years previously, he had been supported during seven and a half days by nutritive enemata alone, except as regards a few ounces of milk swallowed on the sixth day. On this former occasion, also, there were frequent and severe convulsions, with widespread paresis affecting the left limbs in greater degree, the respiration being stertorous, the patient protractedly comatose, and signs of pulmonary congestion and pleurisy being present, with severe cough and vomiting. Throughout this seven and a half days, at the older date, the rectal feeding maintained nutrition and the forces well.

At the necropsy; of the flabby, soft, atrophied brain, with softened central parts, the left cerebral hemisphere was the more advanced in disease, and the posterior spinal meninges and columns rather than the others. Heart flabby, friable. Lungs congested and œdematous. With the abdominal viscera there was not much amiss.

VI.—Age 43, a demented general paralytic. Recurrent convulsions, especially affecting the left side, were followed by left hemiparesis with conjugated deviation of head and eyes to right. Later, left facial spasm, right arm resistant to passive motion and its tendon-reflexes increased, left conjunctiva insensitive, coma, pulmonary congestion and pneumonia, cough severe and frequent. He was unable to swallow. Peptonized enemata were employed safely and beneficially for four days.

Brain-lesions of general paralysis. Left lung some old pleuritic adhesions, hypostatic congestion and pneumonia; right lung more adherent, and the site of lobar pneumonia. Gastric mucous membrane much mottled with ramiform and punctate vascular injection.

VII.—Aged 39. When admitted his heart was feeble. In an apoplectiform attack the limbs were temporarily rigid and helpless, especially the right arm and left leg. Subsequently, semi-stupor, right hemiplegia, head and eyes to right (*sic.*), severe convulsions, some aphasia, inability to swallow, cough, fœtid breath, pulse 120. Put on peptonized enemata; the pulse went down, and the symptoms abated. Subsequent attempts to swallow brought on return of convulsions; spasm persisted about mouth, neck and trunk; dyspnœa; hypostatic pneumonia right side. For six days the food taken was mainly by rectum, and peptonized. Fits persisted, and the patient died.

Atrophy and slight sclerosis of brain, particularly in frontal regions; morbidly facile separation of firm grey from firm white of left third frontal gyrus; meninges thick, opaque, posteriorly tough; slight hæmorrhage in left middle and posterior fossæ of skull-base. Congestion and patches of hypostatic pneumonia in right lung. Atrophy of spleen; slight cirrhosis of liver; patchy congestion and green-grey hue of gastric mucous membranes.

VIII.—Æt. 46. Mitral stenosis, irregular and intermittent heart, widened percussion-dulness; later, mitral bruit. Hepatic tenderness and slight enlargement. Ague attacks. Recurrent bronchitis. Once,

left pleuritic effusion with œdema of legs and ascites. Later, abdominal and hepatic pain, effusion in right pleura, thrice tapped, viz., to one pint, to six pints, and again to one. Finally, albuminuria, œdema of legs and chest, bronchitis and emphysema, congestion of lungs posteriorly, very rapid irregular and paroxysmally tumultuous heart, vomiting, obstinate refusal of food. Enemata of peptonized foods for last four days of life.

Necropsy. Stenotic mitral changes. Dilated and hypertrophied left auricle and right cardiac chambers. Brown induration of lungs, especially of right. Some pleuritic adhesions, traces of cured phthisis, bronchitis, congestion and œdema of lungs, emphysema anteriorly. Unduly firm, rounded, mis-shapen, "nutmeg" liver, with capsule irregularly thickened in parts. Spleen 8½ozs., its capsule thickened and pigmented. Very dark medullary cones of kidneys, and slightly adherent capsules. Mucous membrane of stomach deeply congested, in parts almost to ecchymosis. Transverse colon sunken, curve-wise, towards pelvis.

Other cases might be added, but the above will suffice.

What was stated in an early part of this paper sufficiently explains why nutritive enemata were employed in these cases; a procedure which sometimes helps us, however little, towards the great aim of the physician—to obviate the tendency to death—and I would end, as I began, by guarding against any notion that I advocate rectal feeding when the stomach-tube or funnel can be used with ease and safety; on the contrary I prefer, both for my patients and myself, that food and medicine be received by way of the upper, rather than of the nether, orifice.

Rectal Medication.

So far has rectal feeding, the first part of our subject, exceeded the limits anticipated, that what will be said on rectal medication will be very brief. Two or three points, only, will now be glanced at.

One, I will merely mention, and relatively to epileptiform convulsions. It is the great abatement of the convulsive tendency in some cases by the regular or frequent use of simple or aperient enemata, and the avoidance by this or by other means of the not infrequent constipation.

A second point is more important, and it concerns similar cases. It is the use of enemata of chloral hydrate, plugged into the bowel, to cut short and prevent epileptic and epileptiform seizures. I have made extensive use of this method of treatment in many cases of epilepsy; and of

epileptiform seizures in general paralysis, brain-syphilis, and local hæmorrhage, softening, or induration of the encephalon. Thirty grains, say, dissolved in two ounces, say, of water are administered with the precautions mentioned in the first part of this paper. At the same time the patient's surface should be kept well covered up and warm, and the effect must be watched, especially should it be necessary to repeat the enema; when, if the pulse and heart fail and the surface grow pale, diffusible stimulants must be supplied by mouth or by rectum, by subcutaneous injection or by inhalation. Usually, the enema is not to be repeated.

A third point, is the value of enemata of brandy in some cases of threatened sudden dissolution, when, for various reasons, the fluid cannot be swallowed. The faltering, failing circulation, the ceasing respiration, and the abolished consciousness, are often recalled by artificial respiration, and timely enemata of brandy. Several examples will now be mentioned. I might add a number of other cases, but these suffice as illustrations. Hypodermic injections of some substances; inhalation of others; and the application of the electric currents; are all extremely useful in some of these cases, if readily available, may, indeed, act better. But the physician can always instantly bring artificial respiration into play, and if he has with him, at the moment, even only one intelligent attendant, a brandy enema can be given simultaneously.

J. G., aged 38, had suffered severely from constitutional syphilis; had had also delusions, vivid hallucinations, with excitement and violent conduct. Whilst under notice here, he had extraordinary delusions as to injuries to, and influences on, his body; scaly spots, cranial nodes, and indications of pachymeningitis towards the base of the brain. Between two and three years after admission, he passed through a time of extreme excitement for several months, the face often being flushed, the expression wild and bright, and the delusions of injury mingled with exalted ones. Noisy excitement, restlessness, violence, and insomnia were scarcely held in check by varied treatment. At last, after prolonged excitement, and a feebleness and emaciation so marked that he was usually in bed, he, one morning, had four fits in quick succession. Called to him instantly, I found him cold, with a feeble, slow, irregular and intermittent pulse. Twice his respiration ceased altogether, and he appeared to be dead. Artificial respiration was carried on by Silvester's method for a long time, and brandy enemata were given. Under this treatment he rallied, but for days afterwards the pulse and heart were slow and feeble, and

the respiration feeble. For many weeks afterwards he had to keep his bed; emaciated, restless, noisy, incoherent, and, though feeble, resisting and aggressive.

T. A., æt. 37, a general paralytic.

In earlier period: speech much affected, face less; quasi-syncopal attacks like *petit mal;* once slight right hemiparesis; pains about back and chest; increased knee-jerk.

One day, sitting quietly, he grew dark in the face, and was severely convulsed, mainly on the left side. Coming immediately, I found him apparently dying, respiration having ceased, and the pulse failing. At once artificial respiration was employed, and as soon as possible enemata of brandy were given, yet he continued now and then to grow dark in the face, respiration failing; therefore artificial respiration was frequently resumed. Later, tonic spasm occurred, general in its distribution, but more on the right side; pleurosthotonos, opisthotonos succeeded one another. Then came rigidity of arms, grinding of teeth, champing of jaws, spasmodic thrust of tongue between teeth —to its mutilation. Paresis of third left cranial nerve followed. Three days later there was paralysis of the left limbs and right face. During part of this time, by the way, he was supported by nutritive enemata. Later, were fits; left hemiplegia; return of fits. In the fits of convulsions he always nearly died. At last, nine months later, in a frightful bout of convulsions, he did die. Mentally, he had virtually recovered some time before death.

M. G., æt. 36. A history of syphilis, delirium tremens, and exposure to Indian climate. An agitated suicidal melancholiac. Though a ravenous eater at times, he was frequently given to refusal of food, and was constipated; hence the use of the stomach-pump and of aperient enemata. One day, after crying and praying, with heated head, he had an aperient injection, and later was fed by the stomach-pump. Some vomiting occurred after this; and, subsequently, I was called to see him. He was lying on a sofa, cold all over, with a slow, irregular, intermittent pulse, 51 per minute; rather wide and sluggish pupils, about equal in size; pale face; flaccid limbs. At times he appeared to be dying. But under brandy enemata, a little swallowed brandy, frictions, heat to the surface, hot pediluvia, and sinapisms to the chest, he recovered; though the vomiting of pale amber-colour fluid did not immediately cease, and some peritoneal effusion was found next day, and several days later some muco-enteritis.

Studies of Postures Indicative of the Condition of Mind, as Illustrated in Works of Art. By Francis Warner, M.D. Lond., F.R.C.P. (Illustrated.)

The term posture indicates the relative situation of the several members of the body with regard to each other, or the relative situation of the parts of the member. Now, the posture is the result of the last movement; the description of a posture is the description of the effect of the last movement of the part. Postures may be seen as the result of the action of any part of the muscular system. We may speak of the posture of the hand and upper extremity, the head and neck, the back, &c. Postures depend upon the resultant action of opposing muscles, the relative tone of the flexors and extensors, the adductors and abductors, &c. In the limbs the opposing muscles act upon the bones and move the joints. In the face the contending muscles dilate and contract the apertures for the eyes, mouth, and nose, and otherwise alter the features; hence alterations in these characters in the face may be called its postures. The movements of the eyes being due to antagonistic muscles, the various ocular positions may be similarly termed.

Now, all these kinds of postures are produced by the action of the central nerve-mechanism, and, being the direct outcome of its function, are indices of its condition, and, as such, are worthy of study by observation, description, and analysis.* Many admirable treatises have been written on Expression, describing in such terms as are above referred to the motor outcome of those brain conditions whose mental manifestations are the emotions. As an aid to the exact study of the nerve-mechanism, one of whose functions is mentation, it is here proposed to study the motor action accompanying mentation, this motor function being expressed in terms of postures.

I trust I may not be considered egotistical in referring to the lines of thought that led me to look to works of art as an aid in these studies. Having during some years given special study to the conditions of the nervous system in children, my attention was especially drawn to the various postures presented by children brought for examination at the Children's Hospital, and from 1878 I have kept notes of the spontaneous postures observed. The muscles of

* See "Brain," Parts 12, 14.—"Visible Muscular Conditions."

the hand are probably the most specialised as nerve-muscular agents of the mind. These muscles suffer most in their movements from central affections. Another reason for speaking of the hand as specially indicative of the brain condition is because the hand has a large number of small muscles capable of performing delicate actions and bearing slight weights. The muscles of the hand are particularly under the guidance of the brain. The children were requested to hold out their hands, and the passive condition or posture of the hand was noted. At first it was difficult to describe the postures in anatomical language, though some were seen to be characteristic of certain nerve conditions. In 1879, while visiting Florence, it struck me that the posture of the hands of the Venus de Medici was exactly similar to the posture so often seen in nervous children. Later, at the British Museum, I saw the English Venus side by side with the Diana—feminine coyness and nervousness represented side by side with the expression of energy and strength, and the contrast of the hand postures showed them to be in direct antithesis. While looking at the marble hands it became easy to describe their anatomical postures.*

Venus de Medici.

Now, what can we learn from the study of the Venus de Medici? It may be assumed that the whole figure expresses feminine modesty with self-consciousness, indicated partly by the general position of the body and limbs, and specially by the hands being used to screen the body, though they do not touch it. The figure is that of a nervous woman. Now, as to the posture of the hands, both are

* See paper on "Recurrent Headaches in Children"—"Brit. Med. Journ.," Dec. 6th, 1879.

similar. The wrist is slightly flexed, or bent, the metacarpo-phalangeal joints are moderately hyper-extended (extended back beyond the straight line), the first and second inter-nodes being slightly flexed. The thumb is extended back-wards, and somewhat abducted from the fingers. This posture is commonly used in art to express beauty or weakness and nervous excitability. It is common in female figures, uncommon in those of males. This posture I have therefore called the "nervous hand."

Nervous Hand.

Can any explanation be given why this particular posture should be caused by a brain in the condition of "nervousness?" It seems to me no physiological explanation to say that the individual inherited from his progenitors the tendency to assume this hand posture, of which most people know nothing, under the emotion of "nervousness," and that such posture was of use to his progenitors. Our business is to explain how the machine works as it exists, much as we may desire to know how it came to be what we now find it. I have entered further into this question in an article in "Brain," Oct. 1883, Part 23, but I do not

think any real explanation can be given till we better understand "heredity" and "retentiveness" in the nervous system. I hope to be able to throw some light upon such questions by an experimental method described in the "Journal of Physiology," Vol. iv., No. 2.

Adjoining is an exact copy of engraving by Mr. Kirk, in "Outlines from Figures upon Greek Vases, &c., of the late Sir William Hamilton, MDCCCXIV."

"Plate L. represents festival in honour of Bacchus, and consists of both sexes, who seldom or never were together except in these feasts."

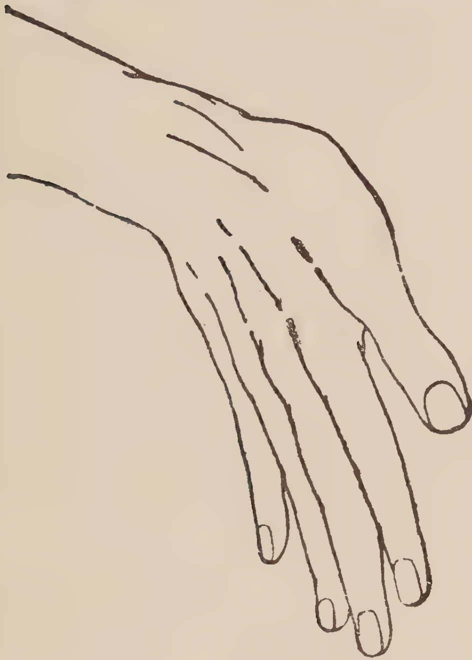
All the hands present some features of the nervous hand, with hyper-extension of the metacarpo-phalangeal joints, so ancient is this mode of expression.

In the Diana of the British Museum we see the figure of a strong, energetic woman. Our common experience tells us that it is such. The head is erect, the advanced right foot gives an expression of firmness, &c. Now examine the postures of the hands. The right is grasping a spear; the left arm hangs by the side, but the hand is free—it is not engaged in anything, but its posture is the representation of the outcome of the brain action only (right hemisphere). As to the posture of this free hand, the wrist is extended (backwards), the fingers and thumb are all in moderate flexion. This hand-posture, being often seen accompanying strong energetic conditions of the mind, and in children when running and excited in play, I have named the "energetic hand." As the result of numerous observations, I believe that this posture of the hand is common as an accompaniment of an active energetic condition of the mind, and that the brain-condition which causes "an energetic condition of the mind" causes also the "energetic hand."

Energetic Hand.

Let us now review the probable physiological condition of the nerve-muscular system of the subject here represented. We cannot say with certainty that the posture of the right hand, which grasps the spear, expresses simply the condition of the nerve-centres (in the left hemisphere) which act upon the muscles of the limb, for it is engaged in grasping the spear. In the left hand there is no proof that the posture is the result of any purposive act; on the contrary, evidence might be brought forward to show that an energetic condition of the nerve-mechanism, whose function is mind, causes the hand spontaneously to assume this posture. Here, then, the right hemisphere is not sending purposive nerve-currents to the muscles of the left hand, but the left hemisphere is sending much motor force to the muscles of the right arm. Does not the skill of the artist appear in the composition which thus indicates to us the nerve-muscular energy of one hemisphere and the "mental" state of the other? Here we find the nerve-muscular condition indicating the state of the nerve-mechanism, whose function is mentation, and did we know exactly the location of the motor centres, it might guide us to the localization of the mental centres.

Now, let us look at the Cain in the Pitti Gallery, Florence. The whole figure expresses horror or mental fear. Each hand is free or disengaged, and in similar posture. The wrist is extended backwards, the knuckles, fingers, and thumb are extended straight. This posture could serve no useful purpose to the man; it seems to be only the result of the spontaneous nerve-muscular force coming off from the brain (both hemispheres) during that condition, whose "mental" action is horror or fear. Here, as in the Venus, the motor action of both hemispheres is represented as similar, and if the artist's representation be true to life and experience founded upon observation, we may conclude that in the living man, under the emotion of fear, both motor and mental action occurs in each hemisphere. It should be stated that in clinical observation postures are often asymmetrical, *e.g.*, the left hand is often in the "nervous posture," the right hand not being so.



Hand in Fright.

In the dying gladiator we learn a different lesson. Neither hand is here free. All the postures of the composition in

marble are the representation of a man in mortal agony, whose urgent dyspnœa determines the position of the body

and of the limbs, which are thus not left free or disengaged, to be acted upon solely by the spontaneous action of the central nerve-mechanism. Sir Charles Bell * drew attention to this point in his critical analysis of this posture.

In Hercules at rest the figure leans upon a club to support his body, and the posture of the right arm is determined mainly by gravity. In neither of these examples do the postures indicate directly the condition of the mind or the nerve-mechanism, whose function is mentation.

It is in the free or disengaged hand that we must look for examples illustrating the condition of the brain which governs it. I have observed many works of art for the purpose of noting in how many cases the limbs are left free to express by their posture the action of the brain, and have found that but few artists think it necessary to employ this means of representing the condition of the mind of their subjects. Hands are most usually represented holding some object or resting upon some part of the figure, or otherwise engaged in trifles. In real life we see the same thing. In society the self-conscious man carries his hat; the very young lady has fan and flowers; the awkward boy thrusts his hands deep into his pockets during conversation to prevent them from performing antics meaningless as the disjointed utterances of his untrained mind.

If so many art-workers do not use postures, *i.e*, the motor function of the brain as the means of expressing the condition of the mind, what is the principle most commonly

* "Philosophy and Anatomy of Expression," 3rd edition.

used? It is not only by the postures and other signs of nerve-muscular action that the mind is indicated; there is the colour and the physiognomy of the face independent of its expression.* By the term physiognomy I understand the shape of the skull or brain-case, and the face, together with the character of the facial tissues and the structure and shape of the features and parts of the face. In a *vulgar*-faced man we see coincident defective or coarse development of the face and of the brain or nerve-mechanism of the mind. A large lower jaw may be very useful for mastication, defence, or attack, but it does not serve to facilitate nerve-muscular action, and is not usually found coincident with a refined action of brain. The form of the subject and the drawing of it may, then, afford much indication of the brain condition; still I believe that the art-representation of nerve-muscular conditions as expressing the brain (mental) condition is a much higher mode of expression than mere indications of the passive physiognomy. Many a face with an indifferent physiognomy is capable of fine mental expression in its mobile conditions.

Much might be said about coincident postures, their analysis, and the principles involved in their study, but this subject is intricate, and requires further elucidation. It is impossible here to do more than touch upon some examples illustrating the subject, but I wish to urge the importance of studying the motor phenomena accompanying the expressions of the mind as signs of its growth and modes of action.

LIST OF ILLUSTRATIONS.

Nervous Hand.
Energetic Hand.
Hand in Fright.
Venus de Medici (Florence).
Diana (British Museum).
Cain (Pitti Gallery, Florence).
Dying Gladiator.
Hercules at Rest.

* See "The Study of the Face as an Index of the Brain:" "Brit. Med. Journal," Aug. 19th and Oct. 21st, 1882.

Precautions against Fire in Lunatic Asylums. By JAMES C. HOWDEN, M.D., Medical Superintendent Royal Lunatic Asylum, Montrose.

Read at the Quarterly Meeting of the Medico-Psychological Association, held at Edinburgh, November, 16, 1883.

The importance of the subject which I propose for discussion is such that I need make no apology for bringing it under your notice. Fire, always a dreaded calamity, becomes complicated with many additional horrors when it breaks out in an asylum for the insane. The crowding under one roof of a mass of human beings, most of whom are incapable of acting for themselves, the locked doors, the secured windows, the often insufficient means of egress, are conditions which render a conflagration an exceptionally appalling calamity.

In the construction of these institutions sufficient attention is seldom given to fire-precautions, either by Architects or Managing Boards; and, though the approval of the Commissioners in Lunacy is required for the site and general plan of a District or County Asylum, I am not aware that they exercise an active censorship over such details until the building is actually occupied. It seems to me that the expression of the individual views and experiences of members of this Association might indicate the precautionary measures best suited for general adoption. Omitting original architectural precautions, such as iron girders, brick arches, and iron partitions, I shall confine my remarks to precautions applicable to any existing building under two heads—first, the means of extinguishing fire, and second, the means to be adopted for the escape and safety of the inmates in the event of a conflagration.

Means of Extinguishing Fire.

Water-Supply.—The first requirement for an asylum, as for any other building, is an abundant water-supply. Institutions near a city or large town have this condition generally fulfilled by a public company or corporation, but in the case of rural asylums the supply is too often insufficient for the daily needs of the establishment, and would be quite inadequate in case of fire, unless means were taken to store water in a reservoir for emergencies. It may be suggested

that where the supply is defective, water may be employed of a quality quite unfit for culinary or even laundry use. Besides rain water from the roofs, water drained from the land, and even surface water, may be collected in underground tanks, and thence pumped when needed by steam or manual labour, or still better, when practicable, supplied to the fire plugs by gravitation. An advantage of this separate system is that the general water service of the establishment is in no way interfered with, and that at brigade drill the water may be freely used for cleaning windows, flushing drains, and many other purposes.

Water Mains and Fire Plugs.—The course and position of these must vary in different institutions. The mains should be three or four inch iron pipes, and when practicable the plugs should be kept well off the building, say 80 feet from the nearest wall.* The number of plugs must be regulated by the character of the building, but, *cæteris paribus*, their usefulness is not necessarily increased by their number, for in rural asylums it is seldom that more than one at a time can be worked effectively, while if you have plenty of hose, easily coupled, any part of the building can be speedily reached if the ground is unimpeded by walls or other obstacles.

Hose Couplings.—The quick-linking coupling should entirely supersede the clumsy old screw, which was so liable to get out of order, and required the employment of a key, easily mislaid in the confusion and darkness of night. The new couplings link instantaneously, and are so constructed that a coil of hose unwinds from them very rapidly.†

Precautions inside the Building.—However important the arrangements outside the building may be, those inside are more so. Fire must be stifled on its first outbreak, and not allowed, if possible, to reach that stage when the outside hose is needed. Rising mains in the staircases, with fire plugs on the landings, extincteurs, portable hand engines and water buckets are among the precautions which most obviously suggest themselves for this purpose. I am disposed to put most reliance on water buckets and hand engines. Fire plugs in staircases cannot be tested without much inconvenience, and when actually needed will probably be found unworkable, especially as they are in situations which

* I have frequently observed fire plugs so close to the building as to be quite unworkable in the event of an extensive conflagration.

† One of the best of these couplings is Morris's patent.

would often be inaccessible if there was much smoke. The extincteur again, is certain in its action, and the charge once exhausted, an interval must elapse ere it is ready for use again. The buckets and hand engines, on the contrary, are always ready, can be moved anywhere, can be used continuously for any length of time if fed from baths or ordinary water taps, and at brigade drill they can can be tested by both men and women without inconvenience, and employed for the purpose of cleaning windows.

Light during the Night.—A jet of gas should be kept burning on each stair landing, and lanterns (common stable candle lanterns are the best) should be in conveniently accessible places, especially in the shed where the fire brigade apparatus is kept. The electric light would be invaluable, and perhaps may be in some cases available.

Fire Brigade.—Every asylum should have its fire brigade which should drill periodically—say once a month, and there should be a detached shed accessible by an ordinary house key where all the brigade gear is kept ready for use. At drill everything should be tested and defects at once repaired.

Precautions for the Safety of Inmates in the Event of a Conflagration.

To ensure speedy exit from the buildings all outside doors communicating with passages and stairs should open outwards, and as many doors as possible, especially those of single rooms, should open from the outside by an ordinary handle without using a key. For the safety of the inmates, among many other reasons, it would be better that an asylum should not be more than two stories in height. Such a building is more easily commanded by the fire hose, and escape more easily effected than from a higher one. Happily our experience is very limited, but in the event of a serious fire breaking out in an asylum the danger of the inmates would probably be greater from the smoke than the flames. The doors of the apartment where the fire occurs should if possible be kept closed so as to prevent the smoke getting access to the staircases. Fire escapes such as are used by City fire brigades would probably be of little service to an asylum where so many persons are congregated, but outside iron staircases would be very useful when the ordinary passages of exit were obstructed.

In conclusion, it may be well to consider what temporary arrangements we could make for the safety of our patients in the event of it being necessary to remove them from the main building, and to bear in mind that our difficulties in this respect are increased where there are no airing courts.

The Physical Conditions of Consciousness. By A. HERZEN, Professor of Physiology, Lausanne. Translated by T. W. McDOWALL, M.D.

I have read with much interest Prof. Cleland's article "On the Seat of Consciousness." I agree with many of the author's opinions, especially with those contained in the critical or negative part of his work; but it appears to me that the positive portion, notably the extension of consciousness to the peripheral terminations of the nerves, is scarcely in agreement with the facts supplied by clinical observation and physiological experiment.

I propose so to examine the physical conditions of consciousness as to show, I hope, that it is possible to give full weight to the objections to the current ideas as to consciousness, without starting a theory which is met at the very beginning by most serious objections, and to arrive at a theory which, however incomplete it may be, appears to me to be at least a provisional expression of the truth, and not in opposition to any important fact, physiological or pathological.

I.

Whilst the majority of psychological physiologists are agreed upon the fundamental principles of monism and upon the necessity of abandoning traditional dualism, they utterly disagree as to the relation of consciousness with the central nervous activity. The English especially have frequently discussed this question. I will quote the two principal representatives of the opposing views: H. Maudsley and G. H. Lewes.

In his "Physiology of Mind," Maudsley often returns to this question *à propos* of the different nervous centres. He absolutely refuses all consciousness to the spinal cord, and attributes the surprising reactions, the co-ordinated reflexes which are obtained from the cord of decapitated frogs, to an unconscious mechanism charged with transmitting the excitation by preformed nervous paths, innate or acquired. He

endeavours to deny consciousness to the sensori-motor centres between the medulla oblongata and the corpus callosum, and attributes the greater complexity of the reactions furnished by animals deprived only of the cerebral hemispheres to the greater complexity of the impressions received through the special senses ; just as the blind mechanism of the spinal cord responds by uniform or slightly varied reactions to the monotonous impressions which it receives, so the sensori-motor centres respond unconsciously by groups or series of co-ordinated movements to the groups and series of external impressions ; the true agent, the only one, is here again the organised mechanism, the nervous excitation travels by pre-established paths acquired by the individual or the race. But in saying this, Maudsley is more prudent than when he speaks of the spinal cord ; he acknowledges that we cannot say with certainty that sensori-motor acts are always unconscious, and ends by admitting that the question is still open. Finally, even when treating of the cortical centres in the cerebral convolutions, the seat of intelligence and will, he appears to admit reluctantly the participation of consciousness in their activity, and tries to convince the reader of the possibility of their acting unconsciously.

We ought, he says, strongly to combat the error of considering consciousness as identical with or equivalent to mind. When all the energy of an idea discharges itself directly externally and gives rise to an ideo-motor reaction, we are not conscious of it. In order that we may be conscious of an idea it is necessary not only that it have a certain intensity, but that it be not entirely expended upon the organs of movement. An idea which disappears from consciousness, does not thereby cease to exist ; it may continue to act in a latent state, and, so to speak, under the horizon of consciousness, whilst the molecular currents which constitute it, become slower by degrees before stopping altogether ; in this sub-conscious state it may still have motor effects, or influence upon other ideas ; if we see effects, which were previously only manifested subsequent to ideas perceived in consciousness, arise unconsciously, we are justified in supposing *the identity of the producing cause in the two cases,* especially as frequently, when our attention is distracted from other objects which occupied it for the time, we suddenly perceive that which we were about to do unconsciously, and we thus seize the unconscious idea in the very act. Consciousness appears, therefore, to require, as the first condition, a certain degree of persistence and intensity of the molecular

current which traverses the circuit of ideation. It thus results that, when meditation is accomplished regularly and rapidly and the chain of ideas is not interrupted, we have afterwards no consciousness of any of the ideas which followed each other; one calling forth the other, without individually impressing the consciousness of the thinker, so that the result at which he arrives may seem to him unexpected or accidental, and it is often difficult, even impossible, to recall singly the different ideas which have led his mind to this result. How many thoughts, born we know not how, do not present themselves in the course of a single day on the threshold of our consciousness! The first current of ideation appears in this case to awaken immediately another and to spread itself in the labyrinth of the cerebral cortex, being constantly transformed, with such rapidity, that it nowhere leaves permanent traces of its intermediate phases.

Since the works of Laycock and Carpenter, no one will deny the fact that the superior cerebral centres *may* act unconsciously; but that surely will not justify us in assuming the productive cause as *identical* in their conscious and unconscious activity; on the contrary, just because there is consciousness in one case and not in the other, we are compelled to admit *a difference in the conditions of the phenomenon*; *the* question is to know when and why (or rather in what circumstances) the central nervous function *is* conscious. To this Maudsley answers: When the excitation has a certain degree of persistence and intensity. This explanation is at least insufficient; what can be more persistent and more intense than the "music" of the celestial spheres, of which he speaks in a note at page 17? And yet we do not hear it. What less intense than the noise of the wings of a gnat, which we hear distinctly enough? What less persistent than an electric spark which we see in all its brilliancy? We must not forget, however, that in the majority of the examples usually quoted in this connection, we have to do with influences which are not apt to excite the activity of the afferent nerves; as long as we have to do with external impressions, consciousness evidently can perceive only the changes induced by the peripheral nerves; consequently when these nerves are not yet excited, or are so no longer, or cannot be so, consciousness perceives nothing at all.

Maudsley, in support of the thesis *that to persist in the same state of consciousness is to be unconscious,* quotes the fact that we do not feel the enormous but constant pressure of the atmosphere upon the surface of our body; but how could we feel it seeing that our nerves are made in such a manner as to be un-

excitable by it? We do not feel it for the same reason that a blind man does not perceive colours and a deaf man does not hear sounds; we have no organ for feeling it. I think we ought to select examples from intercentral reflex action of the cortical layers (that is to say of psychical or mental activity in the limited sense of the word), for it constantly affords empirical examples showing that exercise and habit reduce a crowd of psychical acts at first conscious to complete automatism, *independently of their intensity and persistence.* This is admirably expressed by H. Spencer in his "Principles of Psychology," (Vol. i., p. 499) from which I shall extract the following passage:—

. . . . "When actions which were once *incoherent and voluntary* are frequently repeated, they become *coherent and involuntary,* [*i.e.* automatic, unconscious]. Just as any set of psychical changes, originally displaying Memory, Reason, and Feeling, cease to be conscious, rational, and emotional, as fast as by repetition they grow closely organized, so do they at the same time pass beyond the sphere of volition. Memory, Reason, Feeling, and Will, simultaneously disappear in proportion as psychical changes become automatic. Thus, the child learning to walk, *wills* [and is conscious of] each movement before making it; but the adult, when setting out anywhere, does not think of his legs, but of his destination, and his successive steps are made with no more volition [nor consciousness] than his successive inspirations. Every one of those vocal imitations made by the child in acquiring its mother tongue, or by the man in learning a new language, is voluntarily made; but after years of practice, conversation is carried on without thought of the muscular adjustments required to produce each articulation: the motions of the larynx and mouth respond automatically to the trains of ideas. Similarly with writing, and all other familiar processes."

In general, we may say that the various physical co-ordinations, which at first were deliberately and voluntarily accomplished, that is, with an *anticipated consciousness* of them, become so easy and so rapid, that they take place at once upon adapted stimulation, external or internal, and cease to require a lapse of time sufficient to permit their producing consciousness: they thus become *unconscious,* or automatic.

In spite of these facts, demonstrated by the daily experience of everyone, Lewes will not admit it. In his remarkable work, "The Physical Basis of Mind," he attempts to prove that just as nerves have the special and characteristic property, which he calls neurility, the nervous centres have also a characteristic and special property, which he calls *sensibility.*

It need scarcely be said, that far from wishing to indicate imaginary and metaphysical entities by these two words, he simply proposes them to give a name to the activity peculiar to nervous structure, and so to avoid the continual repetition of the phrase "the special molecular movement awakened by external impressions in the nervous fibres and cells;" he even endeavours to give to these two words a purely objective meaning; that is easily done for neurility, but with great difficulty for sensibility; an objective sensibility is evidently a contradiction in terms, and impossible, since sensibility is not and cannot be anything else than just the *subjectivity* or the subjective aspect of central change, of nervous vibration. And indeed, in spite of the efforts of the author to exclude from what he calls "sensibility" sensation or feeling, in a word, consciousness—in spite of him, subjectivity encroaches on the use he makes of this word, and compels him to attribute memory, judgment, reason, and will *to every active nervous centre*, including the spinal cord of decapitated frogs. The reflex movements observed in them, consequent to peripheral stimulations, he considers to be intelligent and voluntary; now a movement cannot be intelligent and voluntary without being felt subjectively, and that in a definite manner. Lewes quotes a portion of the passage from Spencer which I have just cited, and criticizes it severely; after having admitted that we call *automatic* only those psychical changes which have lost those special qualities which rendered them conscious, intelligent, and emotional, he refutes the assertion according to which *psychical* acts become *physical* by frequent repetition, and maintains that, though ceasing to be conscious, they still continue to be psychical, and thereby differ from physical acts. Doubtless if, following the example of some spiritualists, we accord the status of psychical only to *conscious* central acts, we err in depriving unconscious central changes of their psychical character; but those who describe unconscious psychical acts as automatic do not commit this error; according to them there is no essential distinction between conscious and unconscious acts; in their opinion there is even no essential distinction between psychical and physical acts. In what do the former really differ from the latter? Are not both only a special form of dynamo-material changes, having a subjective aspect for each of us solely because they take place in us, and having the objective aspect only when they take place in another? And what is consciousness, if not precisely the subjective aspect of *certain* of these changes, of which the objective

aspect is "purely physical?" Lewes himself is obliged to say that we may indifferently call sensation "a nervous process," or "a mental process," a molecular movement, or a state of consciousness, *because it is both at the same time, and because we have to do with the two aspects of one and the same reality.* But if this is so, there cannot be any essential difference between the psychical and physical changes, and we must cease to speak of such a difference; the more so as otherwise we fatally approach that dualism which we combat; and, instead of constructing a bridge between obsolete spiritualism and obsolete materialism, we enlarge the abyss which separates them, and which engulfs the unity of being.

It is truly strange to see these two powerful minds, Lewes and Maudsley, both zealous champions of monism, adopting in regard to consciousness two extreme opinions, and thus both approaching by different ways, the abyss which both endeavour to fill up; whilst Lewes attempts to demonstrate the *omnipresence* of consciousness, not only in intellectual acts, but in every nervous act, not excluding the most direct and most automatic spinal reflex, Maudsley tries to prove the *omniabsence* of consciousness, not only in the inferior order of nervous acts, spinal and sensori-motor, but even in the most indirect and least automatic cortical reflex, without excluding intellectual activity. From the commencement of his work Maudsley warns the reader that intelligence and consciousness are two entirely distinct things, that the first may do without the second, that man would be a no worse intellectual machine without consciousness than with it, and that "the agent would continue his activity in spite of the absence of the witness." Does this mean that the agent and the witness are two personages independent of each other? And what is consciousness if psychical activity can continue as well in its absence? We are again at the brink of the abyss: a consciousness which appears at intervals, irregularly, arbitrarily, *i.e.*, accidentally, instead of appearing under determined conditions, and therefore necessarily detaches itself from its nervous substratum, abandoning it in the arms of materialism, and throws itself into the arms of spiritualism. The bridge is destroyed, and the unity of being with it.

It is evident that if on one side we admit the most elementary spinal reflex to be a conscious psychical, and not a physical act; and on the other hand, the highest mental operation to be a physical act of which consciousness is only a frequent, but by no means necessary concomitant, it is evident,

I say, that on both sides we totally sacrifice the evolutionary transition of the simple to the complex, of the least to the most perfect; and that, on either side, we suddenly introduce, either by the termination of the spinal cord or the vault of the cortical layers, a new and absolutely different element, the continual presence of which is as incomprehensible in the first case as its accidental presence in the second. But we are not compelled to choose between these opposite views, the opposition of which arises from the fact of Lewes and Maudsley having each exaggerated the portion of truth in his own view, and neglected the portion of truth in the other; the truth lies, in my opinion, in the synthesis of the two rival opinions, and teaches us, if I am not mistaken, that whatever may be the active centre, the conscious and unconscious always and everywhere co-exist; but sometimes the one, sometimes the other, predominates, according to certain conditions, *i.e.*, to a law, which I shall now attempt to explain.

II.

General physiology shows that nervous tissue, fibres and cells, is no exception to the universal biological law, according to which in life, the period of activity is the period of disorganisation, and that disorganisation is followed step by step by reparation, without which life would be death. My standing-point was thus clear: the nervous elements are disintegrated through action, and are immediately afterwards reintegrated, so that every nervous act has a phase of disintegration and another of reintegration; this latter being accomplished according to the modality of the disintegration which preceded it.

At once there arises this first question: To which of these two phases is consciousness bound? To answer this question there is no possible experiment; only observation can guide us; but it guides us safely and speaks so clearly that we cannot be mistaken: the integration and reintegration of the nervous centres are absolutely unconscious. No one is conscious of the embryonic development of his own brain, nor of the appearance and evolution of his cerebral organs, which proceed as unconsciously as his growth, and as the nutrition of his muscles and bones. Once developed, the central elements are stimulated by incidental impressions. Their activity disintegrates and fatigues the central organ; fatigue is the measure of decomposition depending on activity; fatigue of the brain produces sleep; during sleep it rests, that is it reintegrates; the resulting freshness is the measure of the reparation accomplished.

Now we are conscious whilst awake, unconscious whilst sleeping profoundly; this is a first indication, though very crude, of the bond which unites consciousness with the disorganisation of the active elements. I will prove later that this intermittence occurs in each central act taken separately; the brain may, in fact, be compared to a hall provided with an immense number of gas-burners, but lighted only by a relatively small and constant number of jets, which are not always the same; on the contrary, they change every minute: as one goes out another is lighted; they are never all lighted together, sometimes they are all extinguished. Thus it appears that consciousness is exclusively connected with the disintegrative phase of central nervous acts.

This being established, the second question arises: Is every disintegration conscious? Evidently not, as automatic acts are subconscious or unconscious, although they also are accompanied by disorganisation; gas can also burn without giving light, or only a small, bluish, almost invisible flame. Now, observation shows that if, on one hand, the acts which fatigue the most, which give the largest amount of products of decomposition, which, in short, disintegrate most, are the least automatic and the most conscious; on the other hand, the acts which fatigue least, which are accomplished with the minimum of functional decomposition, are exactly the least conscious and the most automatic. It therefore appears that disintegration produces consciousness only when it is of a certain intensity. Here experiment becomes possible if guided and enlightened by the indispensable control of internal observation; this is why the majority of these observations should be made on man, and why we should not have recourse to animals save where absolutely necessary. I mean the experiments on the duration of psychical acts and on central calorification. Every central act is necessarily connected with the production of a certain quantity of heat; the heat produced is one of the expressions of the functional disorganisation. Unfortunately the observations on this subject cannot be made on man with the desired precision; but the admirable researches of Schiff on animals have thrown a bright light on the relations of central thermogenesis and psychical activity.* I shall only mention here that the production of heat is greater according as the impression received by the animal may be, for whatever reason, agreeable or disagreeable to it, in a word *interesting*, and especially if it be apt to attract its attention, that is to produce

* *Vide* the original paper in "Archives de Physiologie," 1869, No. 1 and 2, and 1870, No. 1, 2, 3 and 4, or my *résumé* in "Revue Philosophique," January, 1877.

a vivid conscious impression; if, on the contrary, the impression leaves it indifferent, that is, if it passes unperceived or almost so, and awakens *little or no consciousness*, very little heat is evolved; consequently the influence of the same frequently repeated impression rapidly diminishes, and we soon arrive at a constant minimum of calorification, due simply to the nervous transmission. These facts clearly indicate that the central acts accompanied most vividly by consciousness are those which require a more extended decomposition and cause a greater calorification; and that consequently, *the intensity of consciousness is in direct ratio to the intensity of the functional disintegration.*

Now what characterises central acts accompanied by the minimum of consciousness or that are altogether unconscious? We have already said it: it is a restricted decomposition and a calorification reduced to a minimum; but it is also, and more particularly, a relatively *very rapid* transmission. In fact, every central nervous act requires a certain time for accomplishment; repetition, exercise, habit, diminish this time, reducing it to the half, to the third, of what it was in the beginning; it is at its maximum when the act to be accomplished is new to the subject, and consequently awakens a very intense consciousness of the sensations which provoke, accompany and follow it; it diminishes in proportion as the act becomes habitual, and thereby approaches the automatic state; it is at its minimum when the act has become altogether automatic and is accomplished unconsciously. Here, I may add, as a drop of rain to the ocean, some observations of my own. I wished to demonstrate on man that the automatic unconscious reactions are really more rapid, and much more so, than the most simple voluntary conscious reactions; this is a fact of daily experience; but it was desirable to demonstrate the relative rapidity of the two kinds of reaction. I have long searched for a method, for it is not easy to find registerable automatic reactions in man. At last the idea struck me to utilise *corns;* the subject had to withdraw his *hand and foot* with a strong volition to withdraw them *simultaneously*, the moment he perceived the tactile sensation I produced by lightly touching his foot; having clearly established that, except at the first trials, which were always uncertain, the individual regularly withdrew *his hand a little before his foot,* I struck, without warning, a little sharp blow on a painful corn; the foot was then withdrawn before the hand, so distinctly so that the individual could frequently himself state that at the moment when he

voluntarily and consciously withdrew his hand, "*his foot had long before withdrawn itself,*" that is to say, involuntarily and unconsciously. Here are two examples: 1st. Simple touching of the foot: the hand precedes the foot by 0″·037 (thrice running); touching of a painful corn: the hand precedes by only 0″·025 (twice); sharp and unexpected blow on the corn: the foot precedes the hand by 0″·100. 2nd. Simple touching of a painful corn: the hand precedes by 0″·050 (three times); slight fillip on the corn: the foot precedes by 0″·050; sharp blow on the corn: the foot precedes by 0″·125.

Thus, since automatic acts are characterised by the small amount of disorganisation and calorification which accompany them, and especially by the rapidity of their accomplishment, it is evident *that the intensity of consciousness is in an inverse ratio to the facility and rapidity of central transmission.* The three partial results that we have obtained directly from observation and experiment when united constitute what I have called the *physical law of consciousness,* which may be formulated in the following manner:—

Consciousness is exclusively connected with the functional disintegration of the central nervous elements; its intensity is in direct proportion to this disintegration, and, simultaneously, in inverse proportion to the facility with which each of these elements transmits to others its functional vibrations, and with which it relapses into repose, into reintegration.

III.

Now let us see how this law applies to the activity of the different nervous centres.

In the daytime, during our waking state, we are continually exposed to all those impressions which our constitution permits us to receive from the external world and from the different parts of our organism. These impressions light successively some of our cerebral "gas-burners"—that is, excite sometimes the one and sometimes the other region of our nervous centres, thus provoking in them a disintegration, which is fluctuating as to the elements concerned, but continuous in itself, and which greatly exceeds the reintegration. Therefore we are continually conscious, now of one thing and now of another. All the stimuli which are not transmitted too rapidly, automatically, from one element to another, or which meet, in the elements they invade, a resistance sufficient to hinder them from passing on without stopping, all which finally have sufficient energy not to be exhausted at the threshold of the central element, but to force an entry and to stimulate its in-

terior, each awakens its own *quantum* of consciousness, which unites with that of the other elements simultaneously disintegrated, to form the *panæsthesia* * of the individual, whatever may be the contents of it, be it personal or impersonal. At night, when the employment of the nervous system has reached certain limits, we experience a feeling of fatigue, a want of sleep, the sensations become dull, external impressions are no longer sufficient to stimulate the nervous centres, which require to be drained and irrigated; the cerebral flames are extinguished one by one, and we fall asleep. Now during sleep, during this periodic preponderance of reintegration over disintegration, we are unconscious.

How about dreams—do you object? But what are dreams, if not sporadic eruptions of disintegrating activity during the periods of reintegration? It may be, indeed, that some region of the brain, having worked *less* than the others, enters into vibration on its own account, in consequence of impressions too feeble to cause the fatigued regions to vibrate, and produces corresponding states of consciousness, or that some region of the brain, having worked *more* than the others, continues to be the seat of a vibration not yet completely stilled, and awakens echoes, more or less clear, of the corresponding representations; or it may be, finally, that these two processes combine, and both participate in the representations evoked by the state of the viscera, and so furnish the varied, strange and absurd associations, which constitute the framework of dreams. At any rate, it is certain that we are conscious only of the cerebro-psychical disintegration, and never of the reintegration.

Instead of the total interruption of consciousness due to profound sleep, let us examine its partial interruptions in the state of wakefulness. You read a chapter which interests you, or you are present at an important lesson, or you reflect in silence on a problem which pre-occupies you: certain regions of your nervous centres suffer profound and extended disintegration, caused by the multiple impressions which affect them, and by the innumerable reflex sensations which they awaken: you are vividly conscious of what is taking place in you. But after some time this occupation fatigues you; you suspend it, in order to have food or take a walk; or for some reason, perhaps unperceived, your psychical activity passes to some other

* I propose this name of *panæsthesia* to express the *totality of what an individual feels at a given moment.* One often designates the same thing by the word *coenæsthesia;* but it seems to me etymologically less suitable, because the entire consciousness may be occupied by one single sensation, and psychologically because one often employs it to indicate the groups of organic or visceral sensations.

regions of the brain, and allows the reintegration to take place in those parts which have been working ; immediately you lose all consciousness of the preceding activity, and are only conscious of the actual activity. In the meantime reintegration takes place, you are rested, you return to your first occupation, and, as soon as the functional vibrations affect there integrated parts, the contents of your consciousness become what they were before—but with this modification: the chaos of impressions then received is now duly arranged into a harmonious whole; reintegration having taken place according to the modality of the disintegration which preceded it; you are in possession of a synthesis, of a new conclusion, of an idea which would not come, but which now comes of its own accord; you have learned something, you have acquired a new faculty; and all this without the least consciousness of the reintegration to which you owe this progress.

Let us restrict ourselves to narrower limits. Whilst reading a chapter you are only conscious, at each single moment, of the phrase that you are reading, and not of the one you have read. The latter has already passed from disintegration to reintegration ; and if at the end of the chapter you possess the contents duly co-ordinated, it is due to the unconscious reintegration of the series of conscious disintegrations.

The same thing may be said of each word which enters into the composition of a phrase; a fact evident in people unfamiliar with the subject of their reading, or the language in which they read. The same may again be said of each letter which enters into the composition of a word; a fact evident in individuals who are learning to read. If we reverse our mode of procedure, we see that whereas the impression of each letter produces in him who is learning to read a conscious disintegration, however transient, he ceases to be conscious of it at the moment when reintegration preponderates, consciousness passes then to the word considered as a whole and taken as a sign or symbol of a group of associations. To him who can read pretty fluently it is no longer each letter but each word which produces a conscious disintegration, immediately replaced by that of the following word; with a little more practice he has no longer consciousness of the partial disintegration produced by each word, because it passes too quickly and easily to the phase of reintegration ; the consciousness of single words fuses into a whole from which results the understanding of the meaning of the phrase in its entirety, considered as the expression of a series of more complex associations. Finally, in him who not only reads fluently and understands the

language very well, but is also familiar with the subject, the same thing happens in regard to entire phrases; through exercise and habit the conscious disintegration produced by each of them passes so rapidly and easily to the phase of reintegration that he has no consciousness of them; but he has consciousness of the extremely complex disintegration which the impression of the successive phrases communicates, with extreme rapidity, to other nervous elements, according to the laws of the association of ideas. Whilst reading he reflects on the meaning of what he reads, that is to say, his consciousness manifests itself by turns in the nervous elements or groups thereof, which the progress of associations stimulates, and disappears in those which have transmitted to their neighbours the phase of disintegration to pass themselves to the phase of the reintegration.

Every moment of our life, every one of the innumerable nervous elements which are called upon to act, continually oscillates between disintegration and reintegration, between consciousness and unconsciousness. The personal or impersonal *panæsthesia* which we have at a given moment is the resultant, or rather the algebraic sum, of the conscious disintegrative phases of all these partial activities. Consciousness (we speak of consciousness *in general*, and not of *self*-consciousness) is continuous, due partly to the continuity of the process of functional disintegration, so that the states of consciousness, whilst passing from one group of central elements to another, are always connected by this or that form of association, and are, from this point of view, really the continuation of each other; and partly to the reviviscence of states of past consciousness, consolidated, or rendered latent, by reintegration, and again liberated when a wave of disintegration disturbs their repose. Thus these numerous isolated vibrations and *revibrations* are fused into what is sometimes called our *coenæsthesia*, or *total* consciousness, which we possess without interruption as long as we are awake; in this total consciousness there is no solution of continuity except when there is an arrest in the neuro-psychical disintegration: during profound sleep, during syncope, and during lethargy.

It seems to me sufficiently clear that the law which I propose applies perfectly to the psychical activity of the cortical centres. I must next show that it applies equally well to the subordinate centres, sensori-motor and spinal.

(*To be continued.*)

CLINICAL NOTES AND CASES.

Case of Insanity of Seven Years' Duration: Treatment by Electricity. By ALEX. ROBERTSON, M.D., F.F.P.S.G., Physician to the Town's Hospital and City Parochial Asylum, Glasgow.

Read at the Quarterly Meeting of the Medico-Psychological Association held at Glasgow, 18th April, 1883.

The value of electricity as a therapeutical agent, particularly in diseases of the nervous and muscular systems, has of late years become widely recognised. There is, however, less assurance of its usefulness in disorders of the mind. This is probably largely due to the comparatively small experience which has been acquired of its action in the treatment of the insane. Still, two important series of observations have been made in this country—besides a few abroad—the one by Dr. Allbutt, of Leeds, in the West Riding Asylum, the other by Dr. Newth, in the Sussex Asylum; and both observers obtained some satisfactory results. But it must be admitted that there is considerable difference in their respective conclusions. Thus Allbutt found very little advantage from it in most cases of melancholia, whereas it was in that class of cases that Newth records the most distinct successes. In narrating its action in a melancholic, Newth states that the result was "most marvellous, and satisfactorily attributable to the treatment." Allbutt noticed most improvement in acute dementia. Just possibly, irrespective of the difference in the cases themselves, the mode of application of the galvanism may have had some influence in determining the character of the effects. Both physicians used the continuous current, but Allbutt applied the two poles to the head, while Newth applied only one to it, the other being in the hand of the same or opposite side, and sometimes in a basin of acidulated water, in which the hands or feet were placed.

It is now many years since I first tried electricity in the treatment of insanity, but the results at that time were of a negative kind. This, I think, was due mainly to the instrument with which I worked not being very reliable, and also to my own want of familiarity with the use of batteries. In the Town's Hospital, of late years, we have

employed both Faradic and continuous currents freely in the different forms of paralysis, and it was the observation of the occasional benefit derived from their action in these conditions that led me lately to think of resuming the use of galvanism in the treatment of mental disease. My observations in this sphere, as yet, are too few to warrant the deduction of any general conclusions. I, therefore, restrict this paper to the record of a single case.

Margaret D., age 50, dealer in old clothes, was admitted into this asylum on 13th August, 1881. She suffered from melancholia, with delusions of suspicion. Thus she imagined that when at her employment people were following her from place to place, were making signs to her, and that the magistrates had employed detectives to dog her steps. These notions, according to her own statements, which were afterwards corroborated, had troubled her for nearly six years before admission, but, notwithstanding their presence, she had been able to attend to her occupation till a few weeks before being certified as insane. Then they had been so dominant as to lead her to stop strangers in the streets and charge them with causing her imaginary troubles.

These were her delusions on admission, and they were associated with a melancholic feeling of average severity. This would sometimes become very intense, so that she had to be carefully guarded against suicide. Her general condition was a little reduced, but there was no organic disease observable. Menstruation had ceased about the time the mental trouble first set in.

The treatment pursued, prior to the use of galvanism, need not be mentioned in detail. The medicinal part of it comprised opium, sulphuric ether, cannabis indica, tonics, and cod-oil; and fly-blisters were applied to the back of the head and neck.

Not long after admission imaginary voices afflicted her very much, and by-and-bye she refused food, so that she required feeding by means of the stomach-pump. In October, 1882, her condition was worse than when she entered the asylum fifteen months previously. At the same time, though there were many hallucinations and delusions, and the mental frame was one of depression, with much misery, outside the morbid circle she talked rationally, and showed considerable intelligence.

On 27th October, 1882, treatment by galvanism was commenced. The continuous current was used, and was obtained from a Leclanche's 40 cell battery. The positive pole was applied over the superior cervical ganglion of the sympathetic, and the negative was slowly moved over the same side of the head, from the brow to the occiput, and up to the middle line of the skull. The current was passed for about seven minutes on the one side, then the electrodes were changed to the other side, and an application for the same

length of time made to it. This was continued every second day till the end of February last, with the exception of three or four occasions, when it was overlooked. The first two applications did not seem to be beneficial; but some hours after the third one, on 4th November, the current being from 15 to 20 cells, she said that her head felt clearer. This improvement, if real, did not continue, for on the 10th November the entry in the journal is: "Complaining of her head being painful to-day; hears imaginary voices of men; thinks her life is in danger; talks much nonsense." On the 13th and 15th of the same month 25 cells were used, the duration of the application being reduced to five minutes on each side of the head. On the 28th the entry is more favourable: "Says her head feels lighter, and thinks that the battery is doing her good; before beginning this treatment complained much of a heavy feeling in the head." Passing over intermediate entries, I find the one of January 10th records marked improvement. It is: "Does not now hear the voices, unless she makes an effort, and then only a little. This, she says, makes her think the voices are in her head and not real. So convinced is she of the benefit she is deriving from the battery that she asks to have her hair cut very short again in order that the current may produce its full effect."

Her progress towards complete recovery was now very rapid, and on March 19th she was dismissed fully recovered. I have since (January 20th, 1884), learned that she continues well. The entry in the journal at the time of her dismissal is: "States that now and for about two months has felt quite well; both voices and the 'nonsense' (to use her own word) about being watched by people have entirely left her. She attributes her recovery to the galvanism; remarked, 'I used to feel my head so heavy that I could not carry it. What a good that battery has done me.'" Latterly her head became much more sensitive to the current than at first, so that at the close of the treatment ten cells was as much as she could bear.

During the earlier applications, which were made by myself, when the current was from ten to twelve cells, no change was observed in the general condition of the patient, beyond a little flushing of the face. The pulse was not accelerated, nor were the pupils dilated. I cannot tell of the effect of the after applications, as these had to be entrusted to an attendant, owing to the pressure of other duties on the medical staff.

Remarks.—The question arises, may not the influence arising from her mind, having been directed away from her morbid thoughts, have been chiefly instrumental in inducing recovery? As against this supposition, it is to be observed that there was no improvement after the first two or three applications, and, further, that the patient is not a woman of a hysterical or impressible temperament.

My idea coincides with that of the patient's, that a direct and beneficial change was produced on the substance of the brain by the action of the electricity. I shall not seek to theorize about the *modus operandi.* It was hoped that the current might perhaps penetrate to the ganglion of the sympathetic and influence the vaso-motor nerves passing to the brain. Besides, it was thought that its direction corresponded, as near as might be, with that of the fibres radiating upwards and outwards from the medulla oblongata to the nerve cells of the hemispherical ganglia, and as these cells are normally affected by stimuli coming upwards along these fibres, so the current would be following a more natural course than if I had passed it between the brow and occiput, or across the head.

Somewhat strong currents were used at most applications. In previous cases treated by me, ten cells was the maximum strength, but in these both poles were applied to the head.

On Cases of General Paralysis with Lateral Sclerosis of the Spinal Cord. By G. H. SAVAGE, M.D.

Read at the Section of Psychology at the Annual Meeting of the Brit. Med. Ass., Liverpool, Aug., 1883.

General Paralysis of the Insane with Changes in the Lateral Columns.—"General paralysis" is now generally recognised to be a term of convenience for a large number of cases that agree but in the outline of their histories, and are uniform or nearly so in their fatal terminations.

As one mode of careful examination after another is developed in medicine it throws side lights on the conditions of diseases which at first were not supposed to be directly connected with it. Thus the ophthalmoscope, which began as an instrument for the assistance of the ophthalmic surgeon, soon passed into the hands of the physician, to be used by him as a most important aid to diagnosis. Again, electricity and the galvanic battery, which were used to detect the malingerer or to rouse the hysterical, have become most important aids, which the physician can have both for differential diagnosis and for therapeutical help. A kind of wave has recently passed over the medical world, and everyone has been talking of reflexes and the battle of their causation; and if their value is still undecided yet much has been learnt, and in this case I believe much that may be

added to the store of knowledge, and not much which will be found to have had but an ephemeral life; for happily the observation is one that is easily made, and requires no costly instrument and little skilled training. When general paralytics came to be tried as to their reflexes it was soon seen that these were, generally speaking, abnormal; and when speaking of reflexes I generally mean the patella reflex, as it is the most easily observed, and is most characteristic. In the one class, reflexes were found to be deficient, and these were generally called ataxic cases; but another class was found to have great exaggeration of the reflexes, and these I have specially to notice in this paper. I shall give a few examples, and shall now only say that they differed in many respects from the cases of general paralysis as more commonly seen.

I would guard myself by saying that I do not pretend that the cases I bring before the meeting are a class apart, as I know similar ones have been described over and over again, but not quite in the same relation and with the same interest as now; simply because several new points have been cleared up by the advance of knowledge. Several of these cases have occurred in young single men who have certainly not led lives of sexual indulgence; whether they had other allied vices I cannot say; but I think not as far as I can judge from their histories, and from their general habits. It is not easy to say whether a young man has been addicted to masturbation, but it is easy to say if he has or has not suffered in general health, and some of the cases were markedly healthy and strong men who had led athletic lives. There was no special relation to the family history, and there was no one causation. Syphilis was acknowledged in several. There was in all more or less exaltation; but I must not leave it implied that such cases occur only in unmarried men or in men alone, as I have had two fatal cases in which it was present in women.

The course of the disease resembles that of most general paralytics, but may be more rapid. The walking is early noticed to be of a peculiar springy kind, so that the foot seems to rise suddenly from the ground on coming in contact with it; I have been in the habit of saying it was of the nature of an exaggerated reflex. At the same time the speech becomes very thick, and there is much more tremor both of lips and tongue than is common. Many of the cases have to fix their eyebrows before they begin to speak, the

cheeks become fat and expressionless, the voice becomes generally changed in a way hard to describe, but yet I think characteristically; restlessness is marked till the patient becomes bedridden. The muscles I think waste more in this variety than in most of the others of general paralysis. The reflexes are much increased, so much in fact that I have known a patient jerk herself out of her chair by a foot slipping accidentally on the ground. The next stage is contraction of the lower limbs. This may be associated with a slight fit of unconsciousness, but the fit is, as a rule, slight. Grinding of the teeth is very common, and I have known a girl literally grind out all her top teeth; the limbs contract, and bedsores develope both on hips and on sacrum, yet the patients will live long in a perfectly demented state, with wasted contracted limbs, and finally die of some secondary trouble.

These cases may have optic disc changes, and I have had several in which there was marked atrophy, a thing I was hardly prepared for, as I was more used to see atrophy with ataxic symptoms. Post-mortem there is a wasted brain with large quantities of fluid in the lateral ventricles, and only few adhesions. There are some wasted convolutions, but I am not in a position to say which are more commonly wasted; but I believe they are the ascending frontal and parietal. The spinal cord, too, is often greatly wasted, and, beside this, there is great change in the lateral columns, and this may occur also in Turck's column in the anterior column of the cord. The point of most interest is to know if the wasting of the lateral columns is primary or if it is secondary, if it is ascending or descending. I think in some cases the changes were first in the cord, and in others that the lateral sclerosis is secondary to wasting or degeneration of the motor areas of the cortex.

I have already stated the fact that syphilis was certainly present in several of the male cases, and among the women another striking fact was that there had been either no children or no living children.

Whether it is only a coincidence or not I do not know, but most of the above patients have bright capillary congestions over the malar bones. These resemble the patches seen in cirrhosis of the liver.

Case I.—Francis R., admitted September, 1881; single; student; aged 30; no history of insanity in the family; no history of injury;

no exact history of syphilis, but there were stated to have been excesses of all kinds.

Six months before admission he began doing odd things, and forgot himself in various ways ; he was naturally vain, and this became more marked. On admission he had the wildest ideas of his power, wealth, and ability. He was restless and amiable. He dressed fantastically, and walked constantly about the grounds. There was much change in his speech, so that his words seemed to come out suddenly, and without his full power to control his lips. His tongue was very tremulous. He was restless, and did not sleep well at night. The pupils were equal at first. The patellar reflexes were somewhat exaggerated.

In November the right pupil was one millimètre larger than the left; both acted to accommodation, but hardly to light. The discs were normal. He steadily became weaker in mind, very emotional, and restless ; he got fat for a time, and lost power over the bladder and rectum.

In March, 1882, he had some tremors of the limbs, followed by stiffness. The muscles re-acted normally to galvanism. He had grinding of the teeth.

He picked up strength for a time, but his speech went on from bad to worse, and any effort to speak set the whole of his facial muscles twitching.

His lower limbs became wasted and contracted, and he lay on a water bed senseless but automatic.

He had a slight convulsive seizure March, 1883, and died in three days.

Post-mortem examination.—The brain was wasted, weighing 44 ounces. There was an excess of fluid, especially in the ventricles. The membranes peeled easily, the surface of the frontal convolution on the left side being rough and pitted. The pons Varolii and the floor of the fourth ventricle had a gelatinous appearance. The spinal cord showed degeneration in the lateral columns.

Case II.—J. L., married, aged 36, without children, having no neurotic history, a teetotaler, was admitted May 10th, 1881. The first symptoms were causeless worry, she said that words addressed to her "turned to gas inside her." Her memory was feeble. She seemed absent and lost. At one time she was melancholic. She had some bodily illness, the nature of which was unknown. some months before admission. Her mind was clear, there were no pains in the limbs, she had some loss of power over her rectum. The patella-reflex was greatly increased, ankle-clonus was well marked on both sides. She steadily lost power and fancied her husband was dead. By May 30th a bed-sore had begun to form. The spinal cord only was examined. Marked changes were found in the lateral columns.

Case III.—Mrs. A., aged 29, married, without children, was admitted Sept. 16th, 1882. She had no neurotic relations. This was

her first attack, she was said never to have menstruated properly, only once or twice having had some slight discharge. She was lively, irritable and industrious. The first symptoms, two months before admission, were that she had increased irritability, she saw imaginary people; said she had been burned, and also that she had been married fifty years. Shortly before admission her gait and speech became affected, but there was no exaltation. It was found her reflexes were much exaggerated; ankle-clonus also was present. Speech on admission was accompanied by hesitation, and there was great tremulousness of the tongue and lips, she was restless and irritable. At present (July 1883) she is restless, and at times both lewd and violent. Her speech is unsteady and her voice has a peculiar harsh twang. There is marked exaltation; so that she says she has many children and is a countess. Discharged uncured.

Case IV.—Frank S., single, age 27, clerk. Was admitted June 13, 1877. There was no neurosis, but his father was "odd." Patient had an injury to his head when eight years of age, and was trephined by Mr. Bryant. Before the present symptoms he had a love disappointment. The first attack which had lasted five weeks began with delusions, he fancied he had a contagious disease, would not go out of doors for fear of the police, and thought people looked at him. He was sleepless, and fancied he could not swallow. He was said to have had syphilis. About three weeks after admission he had a slight fit of some kind, the pupils were widely dilated, unequal, reacting to light, the conjunctivæ were sensitive. Some changes in discs were reported. Facial and lingual tremor were much marked, and articulation became difficult. He had no grandiose ideas. He stripped himself constantly. He gradually became fat, and had a greasy skin. He was more weak in mind. His memory was variable, but not very bad. Temperature in axilla 100°. In November he had a series of fits affecting the left side. The pupils were dilated, the left more so, temperature 103°. He recovered and was much as before, till in December he had some loss of mental power and also of muscular power in the right side; later he had fits affecting the left side again. Tremulousness became more and more marked; and I can recall the fact that his reflexes were most readily started, giving rise to jerks when he was touched. He gradually became weaker and bedridden, his left arm and leg being more contracted than the right. There were rhythmic tremors of the right arm and leg, and the left arm and leg were contracted. It was almost impossible to get his tongue protruded, it was so tremulous. In November, 1878, he had other fits followed by profuse sweating, and considerable rise in temperature; he sank and died. At the post-mortem examination there was no sign of brain lesion from injury. The brain weighed 47 ounces, and appeared much wasted. The membranes were thickened, especially at the vertex. There were adhesions over the right ascending frontal and parietal convolutions; and a great excess of sub-

arachnoid and intraventricular fluid. To the naked eye the spinal cord showed little noteworthy. The heart was large, with some changes in the large vessels. Microscopically the spinal cord showed marked excess of connective tissue in the lateral columns and in the columns of Turck.

Case V.—Edith E. C., a printer's wife, aged 35, without children, was admitted March 2nd, 1883. She had had no marked or serious illness save acute rheumatism as a child. She was not known to have any insane relations. This was her first attack of insanity. The first symptoms, five months before admission, began as suspicion of and dislike to her husband, she made accusations against him. She left her home at night in her bed-gown. There was great incoherence in speech and excitability. She talked about great riches and fancied poison had been given to her. On admission she was in rather weak general health. There was great hesitation in her speech. Her appetite was good ; sleep bad. The pupils were minutely contracted, equal, reacting to light feebly. Taste was perverted. The tongue was tremulous. Her walk was unsteady. The reflexes were much exaggerated, ankle-clonus was present. Her handwriting was very shaky. She rapidly became weaker in mind and body, the tremulousness being very great. On May 6th she had a fit which was general, but more on the right side ; it was not severe. She swallowed with difficulty. She sank and died on May 13th, 1883. At the post-mortem examination there was great wasting of the ascending frontal convolution on the right side. The membranes were adherent over the right first frontal. There was great dilation of the right lateral ventricle. The brain weighed 43 ounces. The spinal cord was small. There was nothing special in the other viscera, save atheroma of the arteries.

A Case of Circular Insanity (Folie Circulaire). By W. Herbert Packer, M.D., L.R.C.P., Senior Assistant Medical Officer, Salop County Asylum.

In the following case the lights and shades are so clearly defined, that it seems worthy of record. The history in detail of the last six months only is given ; her state during the early part of her residence was briefly as follows :—

E.P., aged 61, was admitted into the Salop and Montgomery Counties Asylum on March 22nd, 1880, from the County Gaol, where she had served two out of the three months to which she had been sentenced for stealing a drake. There were at least two previous convictions against her, one for violence and one for receiving.

In the state on admission she was noted to be thin, but wiry ; medium height ; pale complexion ; slight *paralysis*

agitans of head. She had an aortic obstructive murmur, but no marked disturbance of the circulatory system due to it was observed. Mentally, she was noisy and abusive, and threatening everyone; the warders from the gaol especially came in for their share, as she accused them, among other things, of beating and bewitching her. In this state, combined with extreme restlessness, she continued until April 5th, when she became silent and melancholic.

Since then she has alternated between extreme restlessness and excitement combined with great destructive powers, on the one hand, and profound melancholia on the other. In the latter state she can be persuaded to dress and feed herself, but pays no attention to anything going on around her, and only whispers when addressed. Her countenance is pale and expressionless, and she appears physically ill. If permitted she would stay in bed all day, and when got up and dressed lies on a couch for hours without moving. When she awakes, as it were, from this lethargy, she remembers all that has been said or done in her presence whilst it lasted. The duration of each condition has been longer of late; soon after admission each lasted from two to three weeks, whereas now it is about six weeks before a change occurs. The interval of something approaching rational conduct is present, but of short duration; the patient passing in the course of one to four days from melancholia to mania, and *vice versâ*. That she was a criminal lunatic is also an interesting point in this case, as it agrees with the statement put forward by several authors that circular mania in its phase of excitement and exaltation often simulates moral insanity, and is confounded with it.

The following rough notes are a fair description of her condition at the various dates on which they were made:—

March 22, 1883.—After a very noisy time is this morning lying on a sofa, never speaking or moving, and neatly dressed. When spoken to apparently understands, but for a reply only nods. Trembling of head well marked. Takes food readily, but appears feeble and ill.

April 20.—To-day eyes have a more intelligent look, and patient appears to notice what is going on in the ward. Is not speaking or moving about, but keeps to couch.

April 23.—Answers when addressed. Wished medical officer "good morning." These are the first words he has heard her speak for several weeks.

April 24.—Wide awake. Eyes bright, and face all life and action.

Looks generally in much better bodily health. Laughing, threatening, and scolding. Using bad language freely. Dressed tidily, and fairly obedient. Not destructive or violent.

April 25.—Destroyed bed-clothes during the night, and is dressed in rags this morning. Never seems to rest; abusive, threatening, and language most obscene.

May 27.—Somewhat quieter to-day.

May 31.—Now silent and melancholic. Lying still when permitted, but dresses, undresses, or goes to dining-table when told.

June 27.—Yesterday spontaneously got up and walked the length of the ward twice, but would not answer when spoken to, and only shook her head when asked if happy and comfortable. To-day silent and motionless as before.

July 15.—After a stage of incubation of two or three days has to-day become excited, noisy, and restless. Interferes with everyone and everything. All about her are thieves and liars, and also closely related to herself by blood or marriage. Very destructive, and never satisfied till wrapped in rags, with strips wound round her feet instead of shoes. Is very erotic, and invites every man who approaches her.

Sept. 5.—Silent and still; only moves lips slightly when questioned. Became quieter and fairly tractable yesterday.

Oct. 14.—Reading a book to-day.

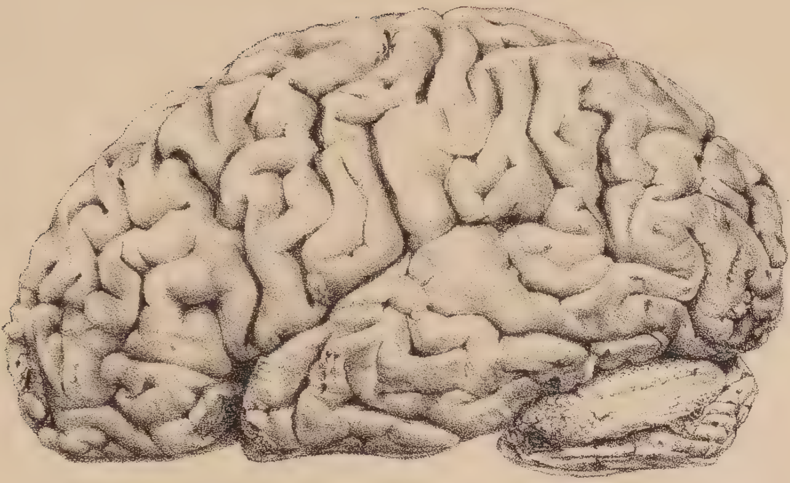
Oct. 16.—Restless, talkative, and interfering. Not yet reached the abusive and destructive stage.

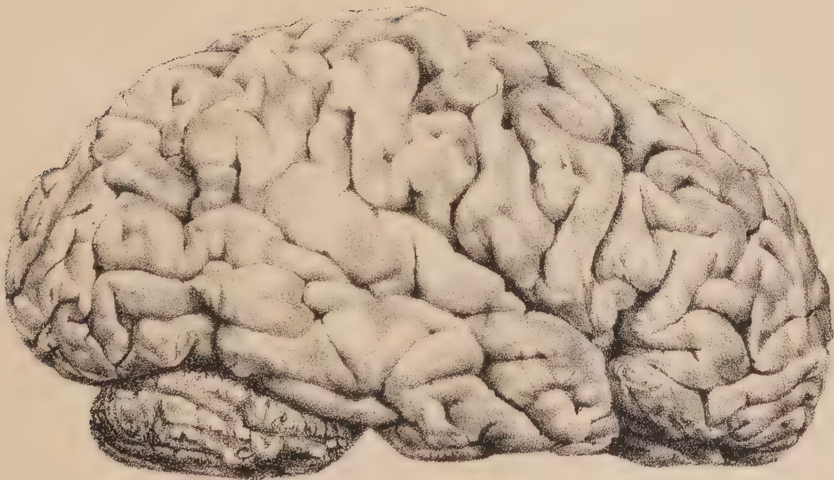
Case of Dementia with Aphasia: Atrophy (with Sclerosis?) of Left Cerebral Hemisphere. By Arthur Rannie, M.B., Pathologist, West Riding Asylum, Wakefield. (With Plate).

Robert S., æt. 51, married, labourer, was admitted into the West Riding Asylum on the 30th March, 1883.

His insanity commenced two years before admission with a fit, with which he was seized one evening while he was sitting by the fire. His wife's statement respecting the fit was that "he appeared to drop to sleep with his eyes open, and could not speak for a few minutes; he then came to himself, and said he felt very 'queer;' at the same time his *right* arm and *left* (?) leg were paralysed. His speech was not affected at this time, but he was quite unable to read after the fit." His power of speech remained unaffected for several months, and then gradually began to fail. Loss of memory soon manifested itself, and in about six months he was quite incapacitated for work. He grew steadily worse, and became excitable and violent at times.

He had been a hard drinker for over twenty years, but had never suffered from *delirium tremens*. He had sustained several injuries to his head through his love of fighting; had never suffered from





Mintern Bros. lith.

TO ILLUSTRATE Dr. RANNIE'S CASE.

syphilis or rheumatism; *was naturally left-handed.* His brothers are intemperate, but otherwise the family history is good. On admission he was found to be suffering from Amnesic Aphasia; could comprehend very little of what was said to him; was quite unable to read or write. On being asked to read he made a great effort to do so, and struggled hard to make out what was before him, but could not distinguish a single letter. To most questions he answered "yes" or "no" indiscriminately. On being asked if he was fond of fighting, he smiled and gesticulated in fighting attitude. He was friendly and attentive, though rather excitable; his expression was considered indicative of a passionate nature. The pupils were of equal size, responded sluggishly to light; horizontal nystagmus to the right; right buccal muscles tremulous when the tongue was protruded; tongue protruded straight and steadily; articulation not impaired; gait slightly reeling; patient reeled slightly when standing with feet together and eyes shut; right knee reflex seemed the greater, though the examination was not satisfactory; right cremasteric and plantar reflexes present; left plantar very slightly marked; no other superficial reflexes present. The grasping power of the right hand was considerably less than that of the left. General bodily condition good. Examination of the other systems revealed nothing abnormal.

From the entries in the case-book, it would appear that, for some time after admission, there was no material change in patient's state. He was at times excitable and noisy, and occasionally required a sedative. All his actions were exaggerated, *e.g.*, when showing his tongue he would raise himself in bed, stretch his mouth to its widest extent, and glare fiercely. He was fairly clean in his habits, and fed himself carefully. His vocabulary was a very limited one, the only words usually distinguishable being "yes," "no," and "God damn." The last-mentioned words he frequently used when annoyed in any way. On one occasion—about three weeks after admission—when asked how long he had been the asylum, he replied "fortnight," and said he had only had "one" meal that day. He never regained the power of reading or writing. On June 10th he had a congestive (?) seizure, involving the right side, without loss of consciousness. The right arm and leg were convulsed, and there was some twitching of the right facial muscles. The convulsions lasted about a minute, and were followed by marked paresis of the right limbs, which, however, passed off in a day or two, leaving the patient in his usual state. He was very excitable, noisy, and troublesome, both before and after the attack. Marked nystagmus to the right was observed after the attack, and persisted until death. After this seizure he gradually became more demented; was frequently restless, mischievous, and troublesome; did not appear to understand anything that was said to him; would assent to any absurdity mentioned, or make no response. On October 1st he was reported as getting thinner and much more

feeble, though still able to get up; would still say "yes" or "no" in reply to a question. On the morning of October 30th he began to pass into a state of coma, which gradually deepened, and he died the following day.

Autopsy 29¾ hours after death.

Body emaciated; post mortem rigidity present in all the limbs.

Skull cap symmetrical; the bones thin and somewhat dense at parts; no adhesions of dura mater; intra-cranial sinuses empty. The membranes covering the vertex had a milky appearance, and were decidedly tough; their meshes were filled with serum, and they stripped with great ease from off the convolutions, more especially those of the left hemisphere. The convolutions were considerably wasted, and the wasting was decidedly greater in the left hemisphere than the right. The left hemisphere was observed also to stand less high than the right. The left supra-marginal, angular and superior temporo-sphenoidal convolutions were very markedly affected, as also, though to a lesser extent, were the ascending parietal and the convolutions of the frontal lobe. There was no indication of coarse lesion externally. The gyri of the insula on the left side, were less voluminous than those on the right, but otherwise appeared unchanged. No difference as regards size could be detected between the lobes of the cerebellum. The occipital lobe of the left hemisphere was distinctly harder and firmer than that of the right; in the other parts of the left hemisphere, though less noticeably than in the occipital lobe, there was a condition of greater firmness than that of the right side—indicative, in all probability, of a certain degree of sclerosis.

The lateral ventricles were greatly dilated and filled with clear serum. The caudate nucleus and optic thalamus on the left side were distinctly smaller and less plump than the corresponding ganglia of the right side. Incisions carried deeply into the ganglia failed to disclose any coarse lesion, but the grey matter of the atrophied ganglia was shallower than that of the right ganglia.

The vessels at the base of the brain were not affected with clot or atheroma. The cranial nerves were of normal size and colour on both sides. About 6oz. of fluid escaped from the cranial cavity.

The whole brain weighed	... ...	1165	grammes.
Right half of Encephalon	... ...	625	"
Left " " "	... ...	540	"
Right lobe of Cerebellum	after hardening	74	"
Left " " "	after hardening	74	"
Pons and Medulla	after hardening	19	"

The spinal cord was not examined.

The other organs presented no conditions of special interest.

Remarks.—The two halves of the encephalon were hardened in a saturated solution of corrosive sublimate and subsequently photographed. I regret that, owing to the action of

the hardening fluid, the brain was rendered unfit for microscopic examination, and hence the case is pathologically incomplete. It is hoped, however, that a fair idea of the macroscopic appearances may be obtained from the figures in the accompanying plate, which are taken from photographs and represent very fairly the unilateral character of the wasting. The weight of the right cerebral hemisphere exceeded that of the left by eighty-five grammes.

The main clinical features of this man's case were: (1), Amnesia with agraphia; (2), paresis of the right limbs; (3), convulsive seizures affecting the right limbs and right facial muscles; (4), horizontal nystagmus to the right. In connection with the first three symptoms it is interesting to note that the ascending parietal, supramarginal, angular and superior temporo-sphenoidal convolutions were more atrophied than any others, and it is highly probable that if a microscopic examination of these parts could have been made, the ultimate structural elements would have been found to be seriously implicated.

Insanity of Twins.—Twins suffering from Melancholia. By ARTHUR FFLINTOFF MICKLE, M.B., Kirklington, Yorks.

I have already reported in the Journal two cases of a similar nature to the following, and through the courtesy of my friend Dr. Bowes, Medical Superintendent of the Wilts County Asylum, I am now permitted to send you the following account of twins suffering from melancholia, with strong suicidal propensities.

The twins were the children of working people (agriculturists), and lived together until they were old enough to earn their own livelihood. They then separated to enter on different occupations, and later in life one of them married and went to America. There was always a strong tie of affection between them, and it exists up to the present time, for though in separate wards in the asylum they are often together in the airing courts, and at other times when circumstances permit. There is a striking resemblance in the personal appearance of the two sisters, and were it not for a slight eruption on the face of the elder it would be difficult to identify them; for they are very much alike in manner and tone of voice, and in the way they express themselves, as well as being similar in feature. Although there is a great

difference in the life history of the twins, they are at present in very similar mental states. Thus, both are melancholic and much absorbed in their own miserable condition; each fears her soul is lost, and both make use of very similar phrases when expressing themselves on this topic. They have shown very strong suicidal tendencies, and frequently ask to be put out of the way, saying they are not fit to live.

Case I.—M.B., admitted into the Wilts County Asylum on the 14th day of October, 1865. She is 29 years of age, single, the younger of twins; can read and write, has been a domestic servant, and was an attendant at an Independent chapel.

The facts for the following history were obtained from the relieving officer and the patient's sister. She is the daughter of respectable working people, was well brought up, has led a moral life, and is of a religious disposition. Twelve years ago she was in a very depressed state of mind, and was very much troubled with the thought that there was no chance of her soul being saved, and other morbid ideas of a religious nature. Whilst suffering from this attack, which lasted six or seven months, she was treated in her own home, and on her recovery she obtained a situation as a domestic servant, and has been thus occupied until twelve months ago, when the first symptoms of the present attack began to develope themselves. She was in her last situation five years, and had a very dull and lonely existence, as she was the only servant of a single elderly lady, who had but few friends and acquaintances, and who frequently left her in sole charge of the house for several weeks together, at the same time forbidding her to have any visitors. Twelve months ago, being in a depressed state of mind, she left her situation, and two months since received a funeral card informing her of the death of her late mistress, which event preyed so much upon her mind that she became very melancholy, and foolishly attributed the death of her late mistress to a broken heart, and imagined she herself was the cause of it. About this time symptoms of a suicidal tendency developed themselves, and she said she was lost, and that the devil was constantly appearing before her. She has five sisters and one brother, and there is no history of hereditary taint; her twin sister, however, has a rather melancholy expression. There was no history of phthisis, chorea, cancer, or intemperance. The predisposing causes appear to be the previous attack—twelve years ago—and the lonely existence in her last situation; whilst the news of the sudden death of her late mistress seems to have acted as an exciting cause, and a love affair which she lately told me of seems to have had a good share in the business. In this case, no doubt a state of mental depression was the beginning of the alienation, and the morbid religious ideas and delusions about her soul were simply evidences of pre-existent disease.

State on admission.—She is a short and thickly-built woman, has

brown hair and irides, a florid healthy complexion, a narrow forehead, and a fairly well shaped, straight nose. She enjoys fair bodily health. The facial expression, manner, and general appearance would give one the impression that she is a somewhat peculiar and weak-minded person. She is in a state of mental depression, and has a melancholic aspect; her conversation is not irrational, but she wanders from the subject on which she is being questioned; says she was very foolish to leave her place, and thinks her late mistress was so fond of her that she died broken-hearted on account of her leaving.

Oct. 23.—She is now much improved in spirits, appearance, and manner; is of opinion that she should not have been brought here, and denies that her conduct or language was such as to justify it. At the same time she says she ought to have done better, for Jesus Christ called her.

Nov. 7th.—Since the last entry she has worked in the laundry, and at first seemed much better, but during the past few days has been very talkative and excitable.

Nov. 10th.—Is full of apprehension about her mother, very excited, talkative, and exceedingly troublesome. She was ordered a nightly draught of tincture of hyoscyamus.

Nov. 16th.—Is now a little quieter, and engaged with needlework. She is, however, still sleepless at night, notwithstanding the hyoscyamus, and her mind is taken up with the idea that she must go before the Queen, and she frequently leaves her seat and walks quickly down the ward as though going on this errand. The hyoscyamus was now omitted, and liq. morph. substituted.

Nov. 21st.—To-day she behaved in a most insane manner; she protested that the medical superintendent had a letter belonging to her, containing directions for her to go before her Majesty; at the same time she refused to take a letter which had been sent by one of her friends.

Jan., 1866.—She is now considerably improved, works in the kitchen, where she is considered a "busy-body," and has been sent to the convalescent ward. The morphia is discontinued.

March 18th.—She continues to work in the kitchen, and is stout and strong; there is, however, no further mental improvement. Two letters were written by her to-day, and both were quite coherent and rational. One of them was to a young man in Manchester, with whom she had kept company when in her last situation. It has always been observed that she is fond of attracting the attention of the opposite sex.

April.—During this month she had an attack of maniacal excitement, and was noisy both day and night. She wishes everyone to be married; frequently quotes passages of Scripture, and boasts of her own safe and satisfactory state as regards her hopes hereafter.

Nov.—The attack of maniacal excitement from which she was suffering at the last entry, gradually subsided, and she soon became quiet and well-behaved. She is now industrious and useful, but very talkative, and still most enthusiastic on all matters connected with religion.

She has had an interview with her friends, and was not much excited by it.

Dec.—She has continued to improve since the last note, and at the earnest appeal of her friends was allowed to go home on trial, and is now discharged "recovered."

Sept. 30th, 1875.—On this day she was re-admitted, suffering from melancholia with delusions. A sister gave the following account of her :—" She has been very well since her discharge from the asylum in 1866, until four months ago, when she became very much depressed and got into much the same state as she was in previous to her first admission. Within the last fortnight she has attempted to drown herself on three or four occasions, and has once been dragged out of a pond. She has also threatened suicide with a knife, and refused food. As regards her bodily condition she is in her usual state of health. Mentally, she is very depressed, has an anxious expression of countenance, and is self-absorbed and reticent. When alone she speaks to herself, and frequently repeats—" Lord have mercy upon us, Christ have mercy upon us." She hopes her soul is not lost ; though very much afraid such is the case, and fears she will be killed.

Oct. 5th.—There is no change in her mental state.

Nov. 5th.—She is extremely agitated and desperate, and has made an attempt to strangle herself, of which there are marks left on her neck. As she was sleepless and very restless during the night, she was ordered a draught of chloral, and tinct. of hyoscyamus, and tinct. of opium thrice daily.

Dec. 7th.—She has made another attempt at strangulation.

Dec. 10th.—Yesterday she secreted a long strip of cloth in the vagina, and again attempted to strangle herself this morning.

Jan., 1876.—Since last entry she has improved wonderfully, and is now both cheerful and industrious.

March 27th.—She is now considered quite well, and was this day discharged "recovered," for the second time.

April 18th, 1878.—To-day she was again admitted. It is now a little over two years since the date of her last discharge, and during this interval she has had to depend almost entirely on parish relief—3s. a week—and it is stated that she has been peculiar nearly all the time, and has spoken very much on religious topics. A month ago she began to alter in her manners, and a week since became excitable and violent. She again said she wished to see the Queen about a call she had received from God, but had neglected. Her twin sister is now an inmate of the asylum.

On admission.—She is fairly quiet, and answers questions on ordinary topics in a rational way. She adheres to the delusion that she has neglected a call from God, but that the Queen has power to obtain her pardon, and asks if she ought to have gone to London to see her Majesty.

Her bodily health is, as usual, pretty good.

April 26th.—Is quiet, and gives little trouble.

May 21st.—She says she ought to be allowed to go before the Queen.

June 10th.—Much improved mentally, and very useful in the wards.

Feb., 1879.—She now seems to have lost her delusion, but is childish in manner.

May 10th.—Is improving rapidly.

May 23rd.—She is now improved so much that she has to-day been sent out on trial.

June 17th.—She has been so troublesome since leaving the asylum that she was to-day brought back by the relieving officer. She is in a very restless and loquacious mood, confused in her ideas, and continually quoting passages of Scripture.

Oct. 29th.—Patient has now improved very much mentally, and never mentions her delusions. She is industrious, and makes herself generally useful.

Feb., 1880.—She continues quiet and well-behaved, rational in her conversation and actions.

May 3rd.—She makes very satisfactory progress.

June 30th.—To-day she was ordered to be discharged on trial.

July 4.—She has unfortunately again become peculiar in her manner, and talks to everyone near her on religious subjects, and consequently it has been necessary to withdraw the order for her discharge.

Dec. 20.—There is no improvement in her mental state.

March, 1881.—She is now not so loquacious as formerly, but her delusions still exist, and she will look at some of the pictures in the ward and say she sees Jesus Christ. Lately she has become very dull and lethargic, seldom speaks, and will sit still for two or three hours, occupied with needlework.

April 27th.—She has improved very much since last note, and was to-day discharged on trial, and on May 25th discharged recovered for the third time.

July 26th, 1882.—To-day she was admitted for the fourth time, after an interval of little more than a year. She is in a very depressed state of mind, fears she may be tempted to commit suicide at any time, and cannot control herself when near water, as she feels an irresistible impulse to jump in. She can give no reason for nor explanation of her state of mind, though she can converse in a fairly rational manner, and has no apparent loss of memory. Her sister states that she remains awake all night, and walks about the house with a lamp, that instead of going to bed she lies on the floor, that she has attempted to drown herself in the rain-water tub, and that she will crouch in a corner of her room and pray for hours, as she fears her soul is lost.

July 27th.—Slept fairly well last night, and is in better spirits this morning, employing herself with needlework.

July 31st.—Is quiet, evidently contented, and is industrious.

During the months of August and September she continued to progress very satisfactorily, and was considered well enough to have the caution against suicide withdrawn. In October she again became very excitable, sleepless and restless, and was oppressed with very unpleasant thoughts regarding her future state, but soon recovered.

In January, 1883, I made the following notes. She is at present in one of her best moods, not nearly so depressed as usual, and converses freely; her memory, perception, and attention are fairly good. She takes an interest in her surroundings, is pleased to attend the weekly associated entertainments, and to go for walks beyond the grounds, and is very anxious to get well and go home.

I did not again see her till the following September, and then found her not nearly so well. She was in a state of great depression and mental and bodily inactivity, was in great doubt and anxiety about her future state, and seemed quite incapable of making any exertion to overcome her morbid thoughts. She had no inclination to converse, and usually sat mute. Occasionally she would exclaim, "I am lost; whatever shall I do to be saved?" She told me she thought it was very foolish of her to get into this state of mind, and was quite conscious of the change since I last saw her, but said in explanation that something had come over her which she could neither explain nor understand, and she had neither the will nor the strength of mind to make an effort to overcome it.

Case II.—M. G. was admitted into the Wilts County Asylum on the twenty-eighth day of June, 1877. She was 41 years of age, a widow, the elder of twins, could read and write, was by occupation a sempstress, and of the same religious persuasion as her sister.

History.—This is the first attack, and commenced about six months ago on her return from America. Some years ago she and her husband went to America, and a little more than six months since, when they were returning home, her husband was taken ill on the voyage and died. This sad and sudden event preyed very much on her mind, and was probably the exciting cause of her mental disturbance, the first symptom of which was great depression; but a short time before admission she became excitable and very troublesome, both by day and by night, and strong suicidal propensities exhibited themselves. No further particulars could be obtained.

On admission.—I think it would be quite superfluous to give a description of her general appearance, for her image reflected by a mirror could scarcely present a more striking resemblance to her than the twin sisters do to one another. She unfortunately has a nasty habit of picking her face, and the eruption thus produced serves as a good distinguishing mark. She was in fair bodily health.

As regards her mental state, her certificate gave the following account:—"Very low-spirited, distressed, and much absorbed in melancholy. Is very much lost and confused in her ideas, and says that she

cannot make it out, that she feels neither one thing nor the other, and thinks she must have given way to the wicked one." As she was very restless and sleepless she was put on chloral and tincture of hyoscyamus thrice daily.

July 2nd.—She has been quieter and not so distressed since taking the medicine, but is still very melancholy.

July 18th.—She is not now so self-absorbed, and assists in needle-work.

Sept. 18th.—She is going on quietly, and is industrious.

Jan., 1878.—There is no change in patient either bodily or mentally.

June.—She is now not nearly so well as at last note, but is frequently noisy and very troublesome, untidy, and does not always attend to the calls of nature.

During the next twelvemonths she had periods of depression and mental exaltation alternating with one another, and exhibited suicidal propensities.

Sept., 1879.—Patient is in a low and desponding state of mind, is very suicidal, restless and talkative at times, and cannot be induced to occupy herself with needle or other work for any length of time. She frequently bemoans her unhappy existence, and expresses a wish to get out of this world.

Dec. 20th.—There is no change for the better in her mental state, she is still extremely low-spirited, has strong suicidal tendencies, and is never left out of sight of an attendant.

March, 1880.—During this month she had a smart attack of facial erysipelas, which was successfully treated by painting with a mixture of liq. ferri perchlor. and glycerine, and the internal administration of iron. No change was produced in her mental state.

Nov.—She has been in a weak and somewhat critical state of health since the attack of erysipelas. She is in a very miserable frame of mind, and says she feels she cannot be of any use to anyone in this world, that her life is worthless, and expresses a wish to die. She is now taking at bedtime a draught of liq. morph, and tr. hyoscyamus, and this produces sound sleep.

March, 1881.—She is now in fairly-good bodily health, but her mental state remains exactly the same as before.

July 10th.—She is in a very low and desponding state of mind, and constantly makes use of the following expressions:—"Put me out of the way, I want to die. I wish you would kill me." Sometimes she is a little more rational in her behaviour and conversation, and more cheerful in spirits, and will assist with the work of the ward. She still has the habit of picking her face, and thus disfigures herself very much. She continues to take the draught of morph. and hyosc. at night.

June, 1882.—Latterly she has become very troublesome and destructive in her habits, has attempted to get up the chimney, and shown strong suicidal tendencies.

July.—She is very noisy and troublesome, and there is no mental improvement.

Dec.—She continues in much the same state as at last note, and there is really no sign of improvement.

In Jan., 1883, I took the following notes of her mental state. She is now much more melancholy and desponding than her twin sister, who at present is fairly well. She has a distressed and anxious facial expression, is disinclined for conversation, takes no interest in her surroundings, and seems entirely occupied with her own morbid ideas. Her memory is impaired, and there is an absence of will and decision, an incapacity for either mental or bodily exertion, and she says she feels weak-minded and has no sense. She frequently exclaims, "Oh! dear, what shall I do? I am lost. I wish I was dead. I had no business to be born," and regrets she did not jump into the sea on the voyage home. After conversing for some time she would brighten up and then express a wish to get well.

I again saw her in the following September, but there was but little change in either her mental state or bodily condition. She told me she felt too weak-minded and too nervous to struggle against her state of depression, and that she would much rather die than live in such a state of misery.

On some Mental Symptoms of Ordinary Brain-disease. By Dr. Gasquet, St. George's Retreat, Burgess Hill.

Read at the Quarterly Meeting of the Association held at Bethlem Hospital, Feb. 5, 1884.

In reading the following notes of some cases that have fallen under my observation during the last few years, my object, I may say at once, is not to impart information. It would hardly be becoming that I should do so, since I have much smaller means of observation than most of you enjoy. My desire is rather a selfish one—to learn myself, not to teach others—and to ascertain whether you have noted the symptoms I am about to describe. If it appears that they are tolerably frequent, and not merely due to a "run" of coincidences in my own practice, which I cannot determine, they seem to me of importance, in both pathology and diagnosis.

Before reading the cases, I had better say that I have omitted, for the sake of brevity, all account of the bodily symptoms where these have no immediate reference to the state of mind. The omission may be supplied by the general remark that all were typical examples of their several diseases, and that the bodily symptoms were com-

pletely developed. I have purposely abstained from including any instance of obscure or doubtful disease, as I might have done.

I. The first is a well-marked case of multiple sclerosis in a male, aged 52. In less than a fortnight after the first appearance of the bodily symptoms of his disorder he began to call himself a Duke; invited the Prime Minister, the Pope, and the Lord Mayor to breakfast, and tried to spend money recklessly, saying he was enormously rich. He then came under my care, and I found him continually occupied with ideas of his own grandeur. He was only satisfied when talking of great people; he said he had recently been made a Duke; he had five millions at call in the Bank of England.

He was not a Prince or a King, he said, but "might be one by-and-bye;" at another time he was "the trustee appointed by God to administer the affairs of this country." A little later his delusions of grandeur became more varied and inconsistent. He continually ordered palaces to be pulled down and rebuilt; he passed laws for the extermination of the labouring classes; at another time he had a steamer which would convey all but the poor to some remote earthly paradise. He quartered (he said) the Royal arms; Napoleon III. died in a palace he had lent him; if he had been consulted, he could have cut the Emperor for stone, and saved his life; he was going to take all the costermongers in a balloon to America.

Delusions, of which these are examples, continued until his death, nearly two years from the beginning of his illness. They were interrupted only by four attacks, which each began with heat of head and flushing of face, and ended with epileptiform convulsions; at these times he occupied himself in devising instruments of torture for his enemies.

He never had any delusions of muscular strength; he was quite aware of his feebleness; the tremors annoyed him exceedingly, and he fully realised that he was suffering from a serious disease.

II. The second case I have to relate is one of syphilis, which had been neglected, a male, aged 32. It began with two fits, followed by an attack of acute mania, which had lasted some weeks before he came under my care. As soon as this had sufficiently cleared off for me to test his state of mind, I found he had well marked delusions of grandeur. He said he was the true God, Christ, a King, all in one breath. He owned 160 millions, and more if one pressed him to say so; "his proper place is above the heavens, but he owns every palace on earth."

He had at no time any delusions of strength, agility, or bodily dexterity, all of which he very rationally disclaimed. He was completely demented for some two months before his death, which was preceded by a prolonged series of fits of Jacksonian epilepsy.

I could unfortunately not obtain leave from his friends to make a post mortem.

III. The third case, that of a male, aged 58, presented well marked symptoms of chronic cerebral softening ("multiple thrombosis"). He had been a literary man of some eminence and had worked hard to maintain his position. He was usually in the jovial condition of a general paralytic; everything in the asylum is lovely, perfection, charming, all around him are the best of good fellows, and he is perfectly happy. He is making enormous fortunes, for which he cares little, as he is also making continual discoveries. These are to revolutionize the world, especially the world of thought; he has devised a mathematical formula for estimating the value of any act of intellect or benevolence; but the nature of his discoveries is continually varying, always, however, grandiose and extravagant. He never manifested any delusions as to his health or strength, which he correctly appreciated. It may be worth noting, though not my point, that this mental condition was interrupted by days or hours of depression and terror, during which he would cry out (apparently under the influence of vivid hallucinations of hearing) that torturers were awaiting him, and that he was to be "finished off" by dogs.

IV. The fourth case, a male aged 48, is one in which about two months after an apoplectic attack, symptoms of mental derangement began. The patient had imperfectly recovered the use of his right leg (the side on which he had been hemiplegic); and descending degeneration of the motor tract had set in, as shown by ankle-clonus, exaggerated knee-jerk, contraction of the right arm, and constant twitching of the hand. He was angry for the moment at being placed in an asylum, but immediately became perfectly friendly with all around. He talked as volubly as some amount of interference with speech would allow him; boasted of his skill as an artist, by which he was going to make a large fortune. He had also some vines in a greenhouse at home, of which the fruit was to bring him in a large sum which he could not state. He said he had received a higher dignity than any man in the world, but he declined to claim any specific title. His main subject of conversation was his brother's wealth, influence, and position; and his own beauty, and elegant, though muscular proportions; both of which were entirely mythical. But he had no delusions whatever of muscular strength, and always spoke of himself as being very ill, and feeling so.

These delusions gradually merged into complete dementia and incoherence after about three months.

Such are the cases I propose to bring before you to-day. In the course of the last few years I have met with one or two others which seemed to be of the same kind. But they were seen in consultation with general practitioners, and it will therefore be readily understood that I had no sufficient opportunity of observing them to justify me in relating them to you.

Of course this material is much too scanty to allow of any conclusion being drawn from it. But it seems to me that it certainly suggests further inquiry. It would doubtless be interesting to know whether delusions of grandeur, so like those of general paralysis, occur in other forms of organic brain-diseases often enough to allow of their study, or whether these were rarities which accident brought before me. If the former, their pathological interest seems to be, that by comparison of the cases presenting these symptoms with those that did not, we might hope to approach a true explanation of the physical condition producing delusions of grandeur. They have also a certain diagnostic importance, as it seems probable that patients such as I have described might be supposed, on a hasty examination, to be suffering from general paralysis. This would be all the more likely if we had a history of fits, and found our patient in a state of general loss of motor power without true paralysis, both conditions often seen in cases of chronic softening (multiple thrombosis). Indeed, the first and third of the cases I have related, were described to me as being general paralytics, before I saw them.

And this suggests the second question which I will put to you. Supposing you have observed cases of grandiose delusions in disease other than general paralysis, were delusions of muscular strength present or absent? It will have been remarked that they were absent in those which I have detailed; and, if this is found to be the rule, we shall obtain a differential character to assist our diagnosis, should it ever be doubtful. Here, again, my cases are too few to do more than allow me to ask you for your experience.

I may remark, in this connection, that none of these patients took that delight in lewd conversation, or in boasting of their sexual powers, that is so common in general paralysis; although two of them at least had the reputation of having led lives of excess in this respect.

I have thought it better to narrow the scope of my paper to these two points; but I may briefly recall the other points of similarity between general paralysis and other "coarse" brain-diseases. Such are the fits already mentioned; the vivid hallucinations, the easily-roused emotions, and the stage of acute mania. All of these, as far as my own experience goes, are more common in cases of multiple thrombosis than in others.

Dr. Savage will probably recognize that these cases, like more illustrious personal histories, serve to point a moral

which he has very forcibly expressed. He remarks, in his account of exophthalmic goître, that, if alienists are open to the blame of neglecting bodily symptoms in insanity, general physicians are at least as guilty of neglecting the mental symptoms of ordinary disease. It is tantalizing to think of the wasted opportunities for advancing mental pathology which must come before every practitioner; but which are wasted because he does not know what to look for, and how to look for it.

Digest of Essays on Hallucinations by Asylum Attendants. Prepared by A. CAMPBELL CLARK, M.B., Glasgow District Asylum, Bothwell.

The interest awakened in the subject of a special training for asylum attendants, and the complimentary references which have been made to these essays by those who have perused them, will I trust, be sufficient excuse for my presenting the following digest of them in the Journal.

I.—Case of M. R., æt. 62. Climacteric melancholia. Hallucinations of hearing, sight, touch, taste, and smell.

(*a.*) *By M. M. F.* "When not excited is pliable; has a good memory, and is always coherent; hearing acute, but sight is not good. She suffers from hallucinations of hearing, sight, taste, smell, and touch. Examples: (1.) She hears her children calling to her, and says that some persons are tempting her to kill them. At such times is much excited, depressed, wrings her hands and weeps. (2.) She sees her children in the fields, and points to them. (3.) Sometimes complains of her food, which she says 'tastes and smells like arsenic.' (4.) Often fights with some imaginary person whom she feels catching her. When persuaded to employ herself, or when having outdoor exercise, her hallucinations subside, and she is less noisy."

(*b.*) *By I. S.* "Has hallucinations of hearing and sight; generally hears and sees at the doors and windows. Hears people scolding and ill-treating her children, and answers the voices back in a scolding tone. It is mostly men's voices that she hears. Seldom strikes, but threatens. At times will reason, and say she knows it is imagination; but only for a moment is she doubtful, for she is immediately as noisy as ever. *Hallucinations of sight:* Sees people running after her children in the fields, and stabbing them with knives. Sees her father and mother in their grave clothes. *Hallucinations of touch:* Not so well marked. Feels men pulling at her clothes in an indecent manner; but I believe they would be easier noticed if she had less control, for she seems to try to hide her ideas of indecency from us."

(*c.*) *By D. M.* "She is as healthy a patient as we have, but she gets extra feeding, and my idea is that patients with such hallucinations need extra diet to keep up their body, for the excitement must be very sore. She is willing to do a little work, and I believe would do more if she were not troubled with voices laughing at her. When people walk past her she fears they may be going to tell 'these blackguards' that she is working. So the work is pitched down, so great is her dread of the people she imagines laugh at her."

Case II.—M. F., æt. 38. Chronic mania, with hallucinations of sight and hearing. Has two sisters insane.

(*a.*) *By C. T.* "She is very fond of staring in the fire, and sees in the flames *visions* and *witches*. She also hears them speaking to her, and has a great hatred of them. Nothing gives so much delight as to get hold of anything dry and inflammable. This she puts in the fire, and in the flames arising therefrom she sees her inveterate enemies, 'visions and witches burning.' Her face then has a look of genuine triumph. She sees the visions, &c., writhing in their agony while being charred and burned, and she sometimes hears them laughing at and mocking her from amidst the flames."

(*b.*) *By M. M. F.* "Appears to hear voices by both ears; sometimes 'through a glass, or a telephone, or a horn.' As a rule, the persons who address her are of high rank. Example, the Duke of Hamilton, Prince Bismarck. The hallucinations of sight are shown by what she calls seeing visions which are visible in pieces of iron, bones, stones, fluff, hair, &c. These she will hide for hours, and when opportunity offers put them in the fire, exclaiming as the flames arise, 'There are the visions.' She also sees living creatures like needles coming out of her body, and then she tries to burn her clothing. She sometimes complains of sulphur being burnt and of vegetables having the odour of sulphur."

(*c.*) *By J. C.* "Sees the spirits of her dead friends, and says that spirits arise from her bed during the night and beats her bed, saying that she is killing them. She says also that they are in her body, and she tries to leap off the table to kill them. Is threatening sometimes to attendants, but good to her fellow-patients."

Case III.—M. C., æt 67. Chronic mania, with delusions of exalted character, and hallucinations of hearing and sight.

(*a.*) *By M. M. F.* "Hearing not very acute, sight very defective. She suffers from hallucinations of hearing and of sight, and has a great many delusions of an exalted character. Example of hallucinations : The King of Sardinia asked her to find out a wife for his son; a doll asked her to give it food; a cat tells her that it is a cousin in disguise; converses with pictures; sees little creatures on the floor and calls out not to tramp on them."

(*b.*) *By C. G.* "She sees the spirits of her friends, and hears them speaking to her on both sides of her head ; holds long conver-

sations with people under the floor; and they don't always tell her things to please her, for sometimes she will be quite sad after talking to them. Is very fond of two dolls, and says that she distinctly saw the spirit of her aunt, which told her that the dolls are her two children."

Case IV.—P. D., æt. 36. Mania, with hallucinations of hearing and violent paroxysms.

(*a.*) *By C. T.* "Seems to be persecuted most by the voice of one person called Biddy, who visits him at no stated times. I have noticed that after the patients' meal is over, and while the attendants are at their meal, there is generally a subdued hum in the dining hall. At that particular time I have seen him repeatedly spring suddenly to his feet, his face pale, eyes wild-looking, and whole body convulsed with passion, and he shouts to her if she does not clear out he will twist her neck."

(*b.*) *By J. M. L.* "Is a little dull of hearing; asks a question frequently more than once before he hears properly. On one occasion when polishing the floor he heard Biddy underneath, and brought the heavy polishing brush on the floor with such violence as to make a hole in it."

Case V.—Mrs. C., æt. 57. Chronic puerperal mania, with religious exaltation and hallucinations of all the senses.

(*a.*) *By C. T.* "She has delusions of identity, calling those around her by other names than their own; and these never change. She has a wonderful memory, and is very good at calculation. What seems to affect her health most is her incessant and violent excitement, due to her delusions and hallucinations. Sees imaginary persons and things with both eyes, and hears imaginary voices with both ears. Her hallucinations are most common during the night. She feels a man called Tait jumping on her at night and striking her with a poker, and declares she is 'black and blue.'"

(*b.*) *By J. M. L.* "It has been noticed on several occasions when working in some corner of the house that she holds conversation in a low tone with some one imaginary, and keeps her eyes fixed on one particular spot. She is violent, noisy, and abusive, but not really dangerous. Even in her most angry passions there is observed a little humour, and her outburst frequently ends in a hideous laugh."

Case VI.—Mrs. M., æt. 62. Climacteric mania, with paroxysmal excitement and hallucinations of hearing.

By S. S. "Inclines to be dangerous; her dangerous attempts are, when interrupted in her conversation, with invisible parties. Hears voices with both ears, more so with the left, which suppurates at times, when at these times she is generally excited and annoyed with people talking to her; calls them by their names; can hear them from the ceiling annoying her about money matters; answers them back in an angry tone, telling them they 'will make nothing of her.' Sud

denly starts up, places herself in an attitude which would make one think she had hallucinations of sight and touch. I have seen M. M. pass for weeks without showing any hallucinations of an open character, but during that interval I have observed her constantly talking to herself; the cause, I should think, of her not giving vent to them is that we restrict her for making a noise. Clean and tidy in habits, sews and does housework, refuses food at times; from experience, I have always thought her much better after an aperient medicine, as she is inclined to be constipated."

Case VII.—Mrs. H., æt. 40. Mania, with hallucinations of hearing, sight, and probably touch. Suicidal tendency well marked.

By S. S. "Has a proud, stern appearance; ideas very exalted; shows a great deal of muscular excitement during hallucinations of touch, such as throwing parties away from her whom she feels drawing her mind and reaping her high talents. Has close communications with a gentleman named 'Sir Oswald,' who is her husband; gets messages from him and also sends him messages about murderers, and also about an old, grey-haired man who is the principal perpetrator of these crimes, the old man even tries to betray and kill the Marchioness of Lorne, but the old 'villain' then draws her mind and she has no power of throwing him off. Sees parties throwing darts at her from the clouds while walking out. Is of a very suspicious disposition. Have observed the hallucinations in this case very bad at night and morning, and also at menstrual periods. At menstrual periods very profuse, nervous voice, and shows a feeble expression and craving sympathy. Have not discovered any symptoms of suicide as yet, but would be apt to doubt her, as she shows it her duty to sacrifice for the good of other patients, which I would say might occur through a motive."

Case VIII.—M. S., æt. 40. Chronic dementia, with homicidal tendency. Has hallucinations of hearing and sight.

By S. S. "Swarthy complexion; expression at times very pleasant, at other times equally savage. Hears people singing in a low, sweet tone; asks the nurse if she hears them; walks stealthily out of the room to listen to the voices, and then comes back laughing, singing, and dancing, and says she saw a regiment of soldiers. Very subject to homicidal attacks; attempts to seize patients with her teeth, or nails, or whatever is most convenient for her; such attacks are usually on the Irish patients. In this case hallucinations of hearing and sight generally go together. Does a little knitting indifferently at times. At menstrual periods inclines to be profuse, and a sallow look comes over the face. Homicidal attacks are oftener before menstrual periods than after them. The only controlling influence at such attacks is to remove her from the parties she takes aversion to."

Case IX.—Mrs. L., æt. 50. Climacteric melancholia now much less acute. Has hallucinations of hearing and sight.

By J. C. "A case of melancholia, with determined suicidal tendencies. First attempted to cut her throat, at another time stabbed herself behind the ear with a pair of scissors; wished her days were at an end, as she is tired of life. Has hallucinations of hearing and sight; hears her husband speaking to her from under the floor, asks him how the children are keeping; hears other voices speaking to her constantly, and after a conversation about the family gets very excited."

Case X.—M. B., æt. 35. Religious mania, with hereditary predisposition, and hallucinations of hearing.

By J. C. "Has hallucinations of hearing. Hears God telling her to work for His sake, and to pray for the other patients, or they will suddenly perish; hears Christ calling her His wife. Noticed that when she prays she always goes to the lavatory, or upstairs to one of the bedrooms; states that it is the Lord's will that she should pray for them. While praying stands at one of the windows in a nude state, with arms stretched out. If interfered with she turns on the attendant, and often a struggle ensues. Bodily health good."

Case XI.—Mrs. H., æt. 37. Mania, with hallucinations of hearing and smell.

By C. G. "A case of hallucinations of hearing and smell. Hears on both sides. Is told by people to prophesy, and quotes portions of Scripture in support of her prophecy. Gets excited now and again for about three weeks at a time; when excited tears her clothes and burns them, as she thinks they have got a bad smell. Goes occasionally to the water taps and lets the water run up her nose to take the bad smell out of her head. She is told to do these things by people. When not excited is very useful, and does any housework or knitting with a will. Takes food well, and, as a general rule, sleeps well."

Case XII.—Mrs. P., æt. 36. Insanity of lactation. Has hallucinations of hearing, and is subject to violent impulses.

By C. G. "Has hallucinations of hearing. When first admitted was very impulsive, and would suddenly run to the door, saying her husband and children were calling her; at other times it would be the powers above. Heard God and people say the whole earth would be set on fire and this place put in an uproar. When out walking heard people calling her, and she was sure to be in the opposite direction from where she was wanted to go; when sitting she is always in a listening attitude, with her head leaning to the left side. I have never seen her talking to her imaginary friends, only listening to them."

Case XIII.—J. S., æt. 52. Congenital imbecility. Has hallucinations of sight. Is fairly intelligent for an imbecile.

By J. M. L. "Has hallucinations of sight, can scarcely utter three words without swearing, and his mind is entirely absorbed with his

hallucinations, which he sees with both eyes. His chief hobby is picking up stones, &c., and looking at them, to see if there are 'ponies,' 'mares,' or 'diamonds' inside them. Makes elephants of soft mud, holds them up and admires them, telling you to look at them moving, what a fine tail he has got, and the 'bonny head.' His chief hallucination is seeing a pair of wings floating in the air; blows them with his mouth with the intention of making them move; he is to fly up to the clouds with the wings. Eyes exceedingly black, and a little shining at times, but he appears to see well. No hallucinations of smell, touch, or taste, and there is no particular time when the hallucinations are most common."

Case XIV.—E. B., æt. 55. Climacteric mania. Delusions of exaltation, and hallucinations of hearing.

By D. M. "Has always a very discontented look upon her face; has always a great many strange hallucinations, both in hearing and sight. She is sometimes awful noisy, and speaks about people that sit in her head annoying her. She only hears these voices on the right side. The people inside her head annoy her to the extent that she strikes herself with great violence on the right side of head with her own hand until it is black. More noisy in the morning than at night. In the middle of her work stops often to cry at the people annoying her, and then strikes herself with renewed violence. Is a great smoker, and if she does not get tobacco regular, blames the people in her head for being the cause of it. Every person in this house dresses themselves with her money; but though in one of her greatest rages, any person asking her anything she gives a very civil answer. More excited when she has not the tobacco; very thin, and no wonder when she excites herself to such an extent that the perspiration is on her face. Particular about her dress, and is cleanly in habits. One strange delusion is that the left side of her head is where the society rooms are, and there her friends reside; they seldom speak to or annoy her."

Case XV.—M. P., æt. 67. Climacteric melancholia. Has hallucinations of hearing, but they are much less severe.

By D. M. "A very quiet patient, with a good many hallucinations of hearing. When admitted would not sit at the window after dark for anything, as she was frightened some men outside the window would take her life; thought she heard them fire shots through the window at her. Does not hear the shots so often now, but hears voices speaking to her, and answers them in a very quiet way; the voices are generally those of some men from the town. Very contented, and never asks for home but when she hears these voices. Is a little dull of hearing; never gets angry at anyone."

Case of Acute Mania Exhibiting a Quasi-aphasic Speech-Affection. By R. B. Mitchell, M.D., Royal Edinburgh Asylum.

A. Y. æt. 50, married, farm-steward, was admitted to the Royal Edinburgh Asylum on 15th September, 1883.

History.—Seven weeks ago, while out shooting in an open boat, he was exposed while overheated to a cold wind and rain. On the following day he suffered from a bad attack of diarrhœa, which, however, was cut short by medicine. Next day he was confined to bed, and suffered from severe pains all over the body, dreadful headache and high fever. He was not able to rise for a fortnight, and during most of that time ate and slept very little, suffering much from intense headache and wandering pains. No swelling of joints was noticed. After getting up he unfortunately exposed himself too soon, and had a relapse which further weakened him very much. About four weeks from the time when he got "chilled" in the boat, and three weeks before his arrival at the asylum, he began to wander in his talk, became very restless and slept very little.

Previous to this illness the patient had been a healthy, strong man. He was intelligent, fairly educated, and of a cheerful, amiable disposition. His habits are, and always have been, particularly steady and temperate. He has one sister who has been insane for some years, but apart from this the family history is very good.

On Admission.—He looked worn and fatigued, as might have been expected, but the expression of his face was fairly intelligent. There was nothing to indicate either exaltation or depression of mind, but there was considerable excitement as evidenced in his continuous articulation. He sat in his chair, gesticulating mildly now and then, and apparently taking no notice of his surroundings. He seemed to understand every request made of him, however, and obeyed an order at once, but in reply to a question one could get nothing but a flow of words conveying no meaning whatever. The following were written down just as he uttered them on the second day after admission, and may be taken as a fair sample of his utterances:—

"Nothing would prove a lass a mouth so many she might give copper deep sea wink the next all storm but I could find any store for Elgin old bright might spare I have old good socks in German nothing blast up town as remarks equal weight," and so on *ad infinitum.* The pitch of his voice never varied, and all the utterances came forth in the same quiet monotone.

Physical State.—Patient was a tall, strongly-built man (weight 12st. 4lb.). Thoracic and abdominal organs all healthy. Tongue tremulous; pupils dilated, equal, sensitive; temperature (E.) 99°·2. The motor powers, with the above exceptions, were normal, as were also the reflex motor and sensory functions.

Progress of Case (condensed).—The patient got a liberal supply

of food and an abundance of milk, and was sent out daily for exercise in the grounds. For the first two days there was no change, and he was sleepless at night. On the 17th Sept. the occiput was shaved and blistered, and he had an aperient dose of calomel and jalap. On the morning of the 18th there was a great improvement; he sat silent in his chair, and only spoke when addressed. He was now able to say "yes," and "no," and "better," intelligently, in reply to questions, but if a longer reply were needed, he simply uttered a string of words; *e.g.* when asked if he felt better he said—"Yes—but away never more might then sleep."

Sept. 22nd.—Only three hours sleep since last note. Mental condition unchanged.

Sept. 27th.—Got only fourteen hours of sleep since last note. His mental state has varied considerably during the week. He has been sometimes able to say "yes" and "no" intelligently in reply to questions, but no more than this, except on one or two occasions, when he replied, "All right," and "Quite well, thanks," propositionally. On one occasion, when asked if he had headache, he nodded, and immediately pointed to his occipital region, but when he tried to tell something more about it only a string of meaningless words came. He was able to name common articles, such as a knife or key, at once; he read a simple sentence correctly, and wrote another from dictation.

Sept 28th.—To-day he wrote the following letter:—

MY DEAR MOTHER,

if nothing yet is proof you have now sold my own manse. You may yet teach my dear Revd. Dr. Jones his birth as proof I am yet alive in Mrs. Smith's in Nairn and the light house is no longer alive in Abdn. John Wales his manse to cheat in Nairn to the same bride and bridegroom in all I remain to Mrs. Johnston and Mr. Johnston of Renfrew to view in all they have to teach to poor proof in in the Scott to bleed in old Abdn, but I am in the class I now came all in the street to the lighthouse a marsh to the summer I taught in simple rage till the whole S. G. T. prove my in the Isles yet

I am my dear nothe (mother ?)

your welcome mother

A— Y—

Oct. 2nd.—The attendant said that the patient conversed quite sensibly with him for nearly an hour to-day.

Oct. 11th.—Since last note the patient has been able once or twice to converse rationally for a short period with the attendants. He is now very much quieter, and sleeps every second night nearly, for four hours or thereby. To-day he wrote to his sister a note, short, but quite free from mistakes, requesting her to come to see him.

Oct. 16th.—Since last entry he frequently relapsed into his old style of utterance, but he has been quite coherent and rational in his conversation all to-day. When asked whether he knew he had been formerly using wrong words in reply to questions, he said that he remembered doing so quite well, but that he could not help himself, and that "they had just to come out in the order they came."

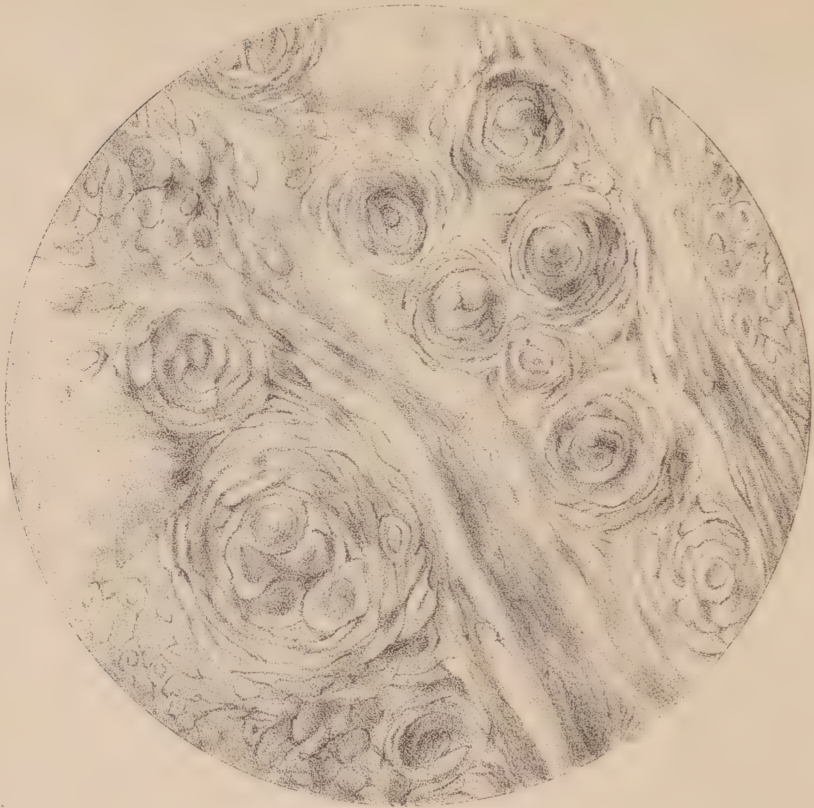
Oct. 18*th.*—Wrote to his wife a long letter quite free from mistakes. He had no more relapses after this, and made a complete recovery, being finally discharged on 19th November.

Commentary.—At first the case seemed an ordinary one of acute mania, but on careful observation it was seen that the utterances of the patient were of a peculiar kind. His articulation was perfect. There was no halting, no spasmodic or explosive utterances, no half-finished words. His talk was totally incoherent to be sure, and the string of words he uttered really conveyed no visible meaning at all, no discernible sequence of ideas even, such as one can generally make out by listening attentively to the babble of most cases of maniacal excitement.

His power to "propositionize" was entirely gone for the time. and in this sense he may be said to have been entirely aphasic, notwithstanding his perpetual utterances. The faculties of attention and perception were not appreciably impaired, and in this lies another point of difference between his case and one of ordinary acute mania or delirium. He obeyed all orders quietly and with alacrity, looking one intelligently in the face all the time. When he began to improve after the first week or so, he could at first reply to questions only by "Yes" and "No" for assent and dissent, uttering these words somewhat hesitatingly, as if not quite sure that they were the right ones; and if he attempted a longer reply at this stage only a string of meaningless words came—words that he did not wish to use. He would sometimes smile (although ordinarily grave-looking) at his own mistakes. It was pretty clear at this stage that the eight or ten words that came were the result of a disappointed effort of his will, and quite different from an ordinary incoherent answer, such as one may get any day from an insane person. At the same stage he was able to convey his meaning by signs (*e.g.*, when asked if he had headache he immediately nodded, and then pointed to his occiput). When he tried to tell one about his headache, however, he could get out only a string of meaningless words (half-a-dozen or so.)

It will be observed that in the first part of his letter there is seen a much nearer approach to speech than in his utterances. Indeed, the first part of the letter does not differ materially from the letter of any patient who talks incoherently. But in the latter part there seem to be distinct indications of a variety of aphasia ("Defect of Speech.")*

* See "Brain," Vol. i., p. 314.



C. Stewart. del.

Fig. 2.

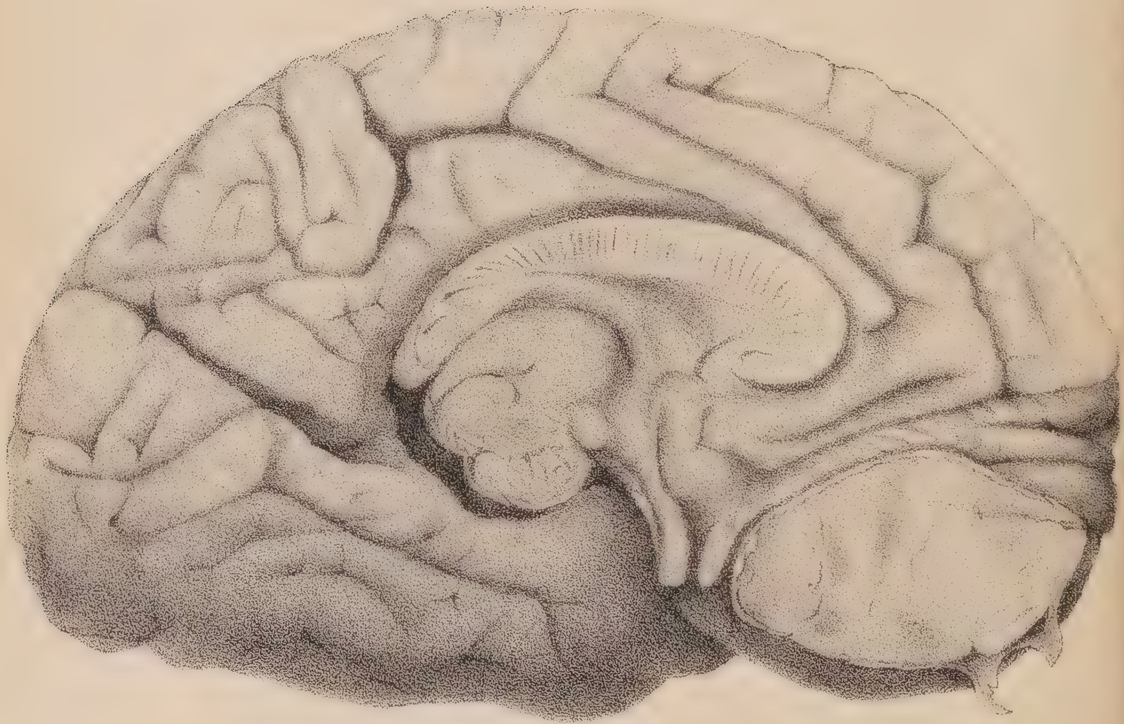


Fig. 1.

L.P. Mark. del.

Mintern Bros. lith.

TO ILLUSTRATE DR. MC. DOWALL'S CASE

Thus I think that he meant, *e.g.*, to write "*steamer*," where he wrote "street," My reasons for believing this are founded on certain circumstances connected with the mode employed to bring him from his home to the Asylum. Again, in closing his epistle, he wrote "nothe," where he evidently meant to write "mother," and finally subscribed himself "*your welcome mother*," where he meant to put your "*affectionate son*." This is strong additional proof of the existence of a distinct aphasic feature in the case.

According to some authors *aphasia* would appear to be due to some lesion of the efferent fibres passing between the convolutions and the great co-ordinating centres in the basal ganglia, while others hold that the phenomena are the result of morbid change in the convolutions themselves. In A. Y.'s case it would seem as if the physiologically lower speech centres (internal speech is meant), being rendered free from the control of the higher (inhibitory) centres, the nervous arrangements used in speech had taken on an automatic and ataxic action; hence a free flow of utterances both in reply to and apart from questions, but without there being any power to choose or guide them in any way.

The pathology of the case is, of course, extremely obscure. The patient possibly suffered from a meningitis of rheumatic origin, and, if so, this condition may have determined the phenomena observed. It may be worth while to note here, in relation to this idea, that in the "Journal of Mental Science," Vol. xiii., p. 528, a case is mentioned—that of a hospital patient, whose loquacity for a few days before death was extraordinary, and who was found after death to have the two anterior lobes of his brain affected with scirrhus cancer, illustrating the possible effect of a local irritation of the convolutions on the speech-function.

Case of Endothelial Tumour of the Dura Mater: General Paralysis. By T. W. McDowall, M.D. (With Plate.)

J. G. T., æt. 48, admitted 14 Dec., 1880, married, inspector of naval machinery, well educated.

Medical certificate :—" Although I have known him for long, he does not now know who I am. When spoken to he does not understand what is said. When asked questions, he simply repeats his own name. He raves indifferently on various subjects. He says his wife has defrauded him of all his money and is conspiring against him.

" His wife states that he has been violent and dangerous. He

wanders about all night and has been apprehended by the police. He has threatened her life, add attacked his father with a poker."

History.—He has usually enjoyed good health, but some years ago he received a severe blow on the head by the falling of an iron door, which fractured his skull and caused the loss of his right eye. He was originally an engine-fitter and has always had good wages. For the last twelve months he has been ailing, and during that time he has had two or three "strokes," the last having occurred about a week ago, when he lost the power of speech entirely. He has become weak and tottering on his legs, has developed delusions of suspicion, and has been occasionally violent. He has been intemperate, but not of late. Since his mind became affected he has been depressed at times. He is cleanly in his habits. Communicated by his wife.

Family History.—Nothing definite can be found out at present.

15th Dec.—Since admission he has been quiet and well-behaved. He has taken his food and slept well.

Physical Condition.—Body well nourished. The right eye is destroyed ; signs of an old fracture of right tibia low down. He is weak and tottering on his legs. The patellar-tendon-reflex is markedly increased ; no ankle-clonus ; plantar reflex much increased. Lips and facial muscles tremulous. Pronunciation halting and blurred. Eye grey ; pupil rather small.

Respir. Syst. Normal.
Circul. „ Normal.
Digest. „ Tongue pale and slightly furred : tremulous.

Mental State.—He is most attentive when spoken to, and answers some questions, but it is a long time before he can form his ideas and express them. He has no notion where he is, or why he was brought here. His memory is almost obliterated. Facial expression demented, but pleased and contented. He does not appear to have any grand delusions, but he evidently does not appreciate his infirm mental and bodily condition. No hallucinations or illusions. He admits intemperance but denies syphilis. He can remember a few past events, *e.g.*, the accident by which his head was hurt, but he is quite at fault as to recent occurrences.

Diagnosis.—Dementia with general paralysis.

16 Dec.—He slept well. Has taken food well. Is cleanly, quiet and sociable.

17 Dec.—Sleeps well ; quiet ; sociable ; cheerful and self-satisfied.

23 Dec.—To-day he is noticed to be pale and very stupid. He falls about, and when assisted on to his legs, is found to be very tottering. The left leg and side seem to be semi-paralysed. Pupil contracted. Ordered to remain indoors.

24 Dec.—Very restless all night. Is quite demented ; takes food fairly ; feeble on legs. No distinctly localised paralysis. Pulse 80-100.

7 Jan.—Quiet, demented, feeble. Kept in bed in Infirmary. Generally restless at nights ; is generally found searching all round

his single room or under the mattresses ; says he has lost his way and cannot find his station, owing to having overslept himself or having got into the wrong train. Takes food well.

19 Jan.—In much the same state ; sometimes awkward and troublesome. Requires chloral at night and brom. of potass. by day.

29 Jan.—Less restless by night and day. Still confined to bed ; feeble on legs. Appetite excellent.

28 Feb.—No change.

16 March.—Gradually becoming more demented, more feeble, and losing flesh though he eats well. Often restless at night, "losing his way" and "searching for things."

13 Ap.—Becoming rapidly worse. He had a slight attack of paralysis about a week ago. He could not speak intelligibly, and could scarcely swallow : great tremor of facial muscles. The right arm was almost quite powerless ; mental powers much enfeebled. Now he has somewhat recovered. He talks fairly distinctly, feeds himself, but is kept in bed.

21 Ap.—To-day he had a prolonged convulsive attack, the left side of face being chiefly affected. The left eye turned to the right side. The left arm was paralysed and helpless ; the right rigid and occasionally convulsed ; the right leg slightly. He is semi-conscious. Passes water in bed.

22 Ap.—Still in same state : can take a little milk when carefully given. Bowels well moved.

23 Ap.—He has now recovered consciousness and convulsions have ceased.

28 Ap.—In his usual state : very feeble and tottering ; cannot stand without support. He now requires to be fed.

7 May.—Feeble and demented. Takes food well and is now able to feed himself.

8 May.—To-day he had two severe epileptiform attacks. The convulsions were general and followed by stertor, complete insensibility, then by prolonged semi-consciousness. Has taken a little milk with difficulty.

14 May.—Since last note, patient has had fits more or less every day. Has been taking chloral in ʒß doses twice daily, and the seizures have markedly diminished in frequency and severity. The left arm is chiefly convulsed now, though sometimes the convulsions are general or affect the whole left side. He has not spoken for some days ; has difficulty in swallowing.

19 May.—Fits slight. Patient very dirty in habits ; smears everything with filth. Very feeble.

24 May.—He has in a measure recovered consciousness, and can answer when spoken to ; looks about him ; swallows plenty of food without difficulty. He is decidedly stronger and can walk if assisted. Occasionally he has a very transient convulsive attack. Very dirty. Chloral discontinued.

3 June.—Has had no fits since last note : is quiet, cheerful, de-

mented; when asked how he is, he always says "first rate." Is in bed, feeble and helpless. Not quite so dirty in his habits. Takes food well, and sleeps a good deal: does not lose flesh.

27 July.—Has so much recovered strength as to be able to be out of bed daily and to feed himself; has lost flesh considerably during last month; is cheerful and self-satisfied.

26 Sept.—Gradually he is becoming more feeble and demented, and has been confined to bed for the last week. During that time he has had several epileptic seizures, but they can at once be stopped by the administration of chloral. The fits are general, but most marked on right (?) side.

18 Oct.—During the last two days the fits have been more frequent, and chloral seems to have lost its former influence over them. He had nearly 40 fits yesterday; to-day they occur about every 10 minutes, and each lasts about 1 minute. The right side of the body jerks as if a succession of electric discharges were being passed through it. The facial muscles on the same side are affected in a similar manner. Each fit is preceded by a piercing cry.

19th Oct.—During the last 12 hours his general condition has changed much for the worse. He cannot take any nourishment, and the fits succeed each other rapidly.

21st Oct.—Yesterday the fits were not so numerous or severe, but he was in a too exhausted state to recover. Died this morning at 8.30.

Post-mortem examination, 27 hours after death.

Rigor mortis well marked in legs, slightly in arms. No bed sores, bruises, or other marks of injury. Hypostatic congestion well marked. Body well nourished.

Skull-cap of average thickness and density; firmly adherent to dura mater in frontal region.

The brain was removed with difficulty, because the tips of the frontal lobes and, talking roughly, their orbital surfaces were either adherent to the dura mater or continuous with it. The area mentioned contains a hard tumour, which projects deeply on each side of the crista galli. So far as can be made out the bones of the skull are not involved, though reddened in a peculiar way (they are of normal hardness), but the dura mater anterior to the sella turcica cannot be separated or distinguished from the tumour.

Under surface of brain.—A tumour extends from optic commissure to tip of frontal lobes. It seems only to displace the convolutions, and involves mainly the first frontal on each side. Its posterior extremity touches, but does not involve the optic commissure and nerves. The right optic nerve and left tract are markedly atrophied. The internal half of tip of left tempero-sphenoidal lobe is represented by a bag of serum as large as a walnut. There is no atheroma of vessels at base.

Superior surface.—Vessels full of dark blood. The convolutions are flattened. The membranes are clear and transparent except to a slight

extent in the parietal region. The membranes are adherent in many spots to the subjacent convolutions.

On section antero-posteriorly (see illustration) the tumour is found to occupy nearly the whole of each frontal lobe. The tumour is so hard that it creaks under the knife, like an ordinary scirrhus. Near the under surface it contains a few small bony spiculæ. The tumour is not surrounded by softened brain-tissue, and it can in most places be separated from the neighbouring textures. A large portion of superior surface of left frontal lobe is soft to touch, but not changed in external appearance.

Whole brain, freed from fluid, weighs 49 oz.

Microscopic examination of the tumour (in fresh state) showed it to be very rich in vessels. It is evidently cancerous in nature, and the cells are arranged in nests, as is so frequently seen in epithelial growths. When the nests have opened out the cells are as a rule very long and narrow, very much like connective tissue of fibres and corpuscles. Juice scraped from surface of tumour contains cells of a variety of shape ; all evidently cancerous.

Floor of 4th ventricle rough and thickened. Cord removed. Both layers of arachnoid opaque, thickened, and, as a rule, adherent, especially in dorsal region.

No further examination of body permitted.

Remarks.—The drawings which accompany this record sufficiently show the position and structure of the growth. No. 1 shows the internal aspect of the left hemisphere and the surface of the tumour after section antero-posteriorly. It is a typical example of its kind, and lithograph No. 2 showing its minute structure does so exceedingly well. As to its mode of growth, it may be as well to quote from Ziegler's "General Pathological Anatomy" (translated by Macalister). He says: "The way in which the alveolar structure is developed can often be clearly made out, especially in tumours of the central nervous system. The normal intervascular tissue is transformed into masses of sarcoma-cells, while septa are formed between the cell-masses by the fibrous tissues lying along the course of the vessels. In other cases it looks as if a plexus of pre-existing or new-formed vessels took on as it were an investment of cells, and this grew thicker and thicker till at length the intervascular spaces were entirely filled up. Accordingly we find this form of growth described as a plexiform angio-sarcoma. It has also been described, and not infrequently, as endothelioma. On this view the cell-nests arise by proliferation from endothelial cells. This certainly happens when masses of cells are formed from the endothelial covering of the subarachnoid

meshwork and pia mater; the masses afterwards group themselves into 'nests.'" In a note Ziegler states that the vessels of the brain, lymphatic glands, serous membranes, and testis possess what is called a perithelium, that is the adventitia is invested with endothelial cells. Proliferation begins in the cells of this perithelium, and the vessel is thus invested with a stratified covering.

OCCASIONAL NOTES OF THE QUARTER.

The Isle of Man Asylum and Dr. Outterson Wood.

It will aid the understanding of the circumstances under which recent changes have taken place in the Isle of Man Asylum, if we briefly explain the character of the management and government of that institution.

The government is vested in the Tynwald Court. This consists of two branches, (*a*) The House of Keys (or the representative branch) The Government of the Island, and (*b*) The Council, the latter being composed of eight members appointed by the Home Government.

The House of Keys and the Council meet as separate bodies, each in their legislative capacities; and combined, they act in their executive capacities for the purpose of discussing important public questions, passing bills, and the appointment of Committees, such as the Highway Board, the Harbour Board, and the Lunatic Asylum Committee. The latter is appointed annually, a fact not without significance in recent troubles.

The present asylum was built and opened in 1868. From that time till 1881 Sir William Drinkwater had been a member of that Committee, and acted as Chairman. The number of the patients had steadily increased, and more accommodation was imperatively called for. To meet this Sir Wm. Drinkwater, and Committee, laid before the Tynwald Court a plan to provide increased accommodation for the female patients. This was objected to by the House of Keys. The resignation of Sir William Drinkwater and his colleagues followed, a Committee of the House of Keys having been formed to consider the necessity (if any) of providing increased accommodation in the asylum. In the meantime another Asylum Committee had been appointed by the Tynwald Court, under the chairmanship of the

Speaker of the House of Keys, Major J. S. Goldie Taubman. The Committee of the House of Keys was composed of seven members. Two of them went to Scotland, visited Morningside, Woodilee, and the Stirling District Asylum at Larbert, and on their return they presented a report in writing to their Committee, based upon what they had witnessed, in favour of converting a range of new workshops into patients' rooms, and converting the large dining and recreation hall of the asylum into day-room space; and they made other suggestions unnecessary to mention here. Upon this the Committee of the House of Keys founded their report, which was published. The report was replied to by the Asylum Committee, which laid plans before the Legislature adopting *in toto* the plan advocated by Sir Wm. Drinkwater and his Committee for female accommodation, and, in addition, pointed out what would be necessary for the men. The annual election of the Asylum Committee took place, and it was the desire of the House of Keys to place upon that Committee members of the House of Keys only. This the Governor and Council resolutely opposed, and a dead-lock in the Legislature ensued. A compromise was, however, arrived at; and two of the principal opponents of the asylum extension scheme were allowed to be placed upon the Asylum Committee on the understanding that no change whatever should be made in the management of the asylum, and that the Committee should continue in office only until the opinion of the Scotch Board of Lunacy should be obtained as to the extension of the asylum.* The *Scotch* Board was selected as a concession to the strong wish expressed by the opponents of the extension scheme. The Governor of the Island (Mr Spencer Walpole), at the request of the Tynwald Court, applied to the Home Secretary, and asked that the Scotch Commissioners should visit the Island to report on the question in dispute. The consent of the Home Secretary was obtained, and the Governor asked the Scotch Commissioners to send over to the Island one of their body. The Scotch Lunacy Board, however, declined to interfere, and suggested the names of four gentlemen of eminence in the asylum world. One of these—Dr. Clouston—was selected. He visited the Island, and prepared an elaborate report, with plans, showing the amount of accommodation necessary in his opinion, and the manner in which

* This Committee acted under the Chairmanship of Sir James Gell, Her Majesty's Attorney General.

it should be made. This plan advocated what was clearly a compromise as to the manner in which it should be provided, condemned the idea of making the central dining hall a day-room, and praised the management of the institution. Dr. Clouston proposed making the population of the asylum equal to 219 patients. On Dr. Clouston's report being laid before the Tynwald Court the Asylum Committee, according to agreement, resigned office; and as the annual election of the Committee was to take place within three months, a provisional one was appointed to carry on the asylum till 1883. When the time for electing the Asylum Committee arrived, a dead-lock again occurred, the Council refusing to admit the two principal opponents of the asylum scheme to sit on the Committee, and ultimately others were appointed. The election of the Committee took place in the middle of July. The Committee held its first sitting at the asylum Aug. 14. Everything appeared harmonious and pleasant—the Chairman of the Committee (Mr Clucas) leaving the Island for a holiday. He returned on September 4, and a meeting of the Committee was held on the following day; and it appears that, without anything being said to the Medical Superintendent, a resolution was passed* to the effect that it was to the interest of the Island and its insane that the asylum and the patients therein, including such pauper patients as might be boarded out, should be managed according to the Scotch system, and that to carry this out, it was essential that the asylum should have a man who had acquired his experience in Scotch asylums. Further that it would probably be a failure to employ anyone to carry out the boarding-out proposed by Dr. Clouston, who had not so acquired his experience, and had formed an adverse opinion to it. Consequently the Committee decided that it was necessary that "the present arrangement existing between Dr. Wood and the Committee should terminate, in order to secure to them full liberty of action." This, it should be added, has reference also to another point not then determined upon, namely, whether the office of Medical Officer and Superintendent should be held by one person. The Chairman was authorised to communicate this decision to Dr. Wood.

The resolution is professedly based on the information obtained from the Scotch Lunacy Board and Dr. Clouston's

* From the debate in the Tynwald Court we gather that two members out of five were opposed to this resolution.

report. That it was totally unnecessary to dismiss Dr. Wood, however, and import a man from Scotland, is proved by Dr. Clouston's own statement: "If a boarding-out system is established, I think it essential that Dr. Wood should come over to Scotland to see our asylum in operation; one of the Deputy Commissioners would, no doubt, give him every facility" (p. 20). This was all that was necessary. For reasons best known to themselves the Committee of Management pursued a different course, and declined to follow Dr. Clouston's advice.

How this resolution was received by his Excellency the Governor can readily be seen by the correspondence between him and the Chairman of the Committee of Management, Mr. Clucas, and so indignant was Sir Wm. Drinkwater and others high in office, that a motion expressing regret at the course pursued was brought forward in the Tynwald Court, and a debate, which lasted for two days, in which every opportunity was given to support and explain the conduct of the Committee in passing such a resolution utterly failed, and no charge was made against the Medical Superintendent which could possibly justify such a resolution. On the question being put to the vote it was lost in the House of Keys and carried in the Council, so that no resolution was arrived at on the subject, seeing that the resolution to be effective must be carried by both houses sitting together.

In consequence of the resolution of the Committee, the Medical Superintendent tendered his resignation, which was accepted.

Such is a plain statement, undisputed, so far as we are aware, of the course of events which has led to what we cannot but regard as a lamentable result. A Medical Superintendent is dismissed from his office, after eight years' devotion to his duties, during which time the annual reports of the Committee speak of him in uniformly favourable terms,* without the slightest charge being brought against his moral character or his administrative ability, on the ground that it is desired to introduce into the asylum and

* Thus in the annual report of the Asylum, made to the Tynwald Court, July 5, 1883, we read—"that the members of the Committee considered it inadvisable to interfere in the management of the Asylum beyond seeing that it was worked by the Medical Superintendent in the manner approved of by the preceding Committees, of which his Honour, Deemster Drinkwater presided as Chairman for many years. They are satisfied that it has been so managed; that the patients have been kept clean, healthy, and comfortable, and that the Asylum itself has been kept fresh and clean."

the treatment of the Manx lunatics what is called the Scotch system. We cannot but think that our intelligent colleagues north of the Tweed must by turns smile and blush to read the absurd statements made in the course of this discussion, about their peculiar powers in the treatment of the insane. We are not blind to what has been done in recent years in and out of asylums in Scotland, while the admirable labours of the Lunacy Board have revolutionized the frightful abuses in the treatment of the insane in that country. But a stranger might suppose, to listen to the way in which some persons have spoken during this debate, that there was some radical difference between the treatment of lunacy in England and Scotland, greatly to the disadvantage of the former, and one which would properly lead to the application for advice on the part of the Isle of Man Asylum to the Board in Edinburgh in preference to that in London, and, as a corollary, to the dismissal of an Englishman and the substitution of a Scotchman. "There is no difference whatever," well observed Sir Wm. Drinkwater in the debate referred to,* "in the general system of the treatment of lunatics in England and Scotland. . . An English gentleman of high standing, recommended as Dr. Wood was,† is as capable as regards the treatment as any superintendent of an asylum in Scotland. I say nothing against the gentlemen in Scotland. They are as able as the gentlemen in England. Let the Committee of Management point out, if they can, any difference in the general treatment of the lunatics in Scotland and in England. They say there is a difference in the boarding-out. . . . But what is there in the system of boarding-out which one week's acquaintance with it in Scotland could not discover? . . . Is Dr. Wood to be dismissed because he cannot be trusted to the boarding-out of a certain number of lunatics?" On the subject of open doors in asylums, the same speaker remarked—"I don't say whether it is right or wrong that the doors should be locked. . . . They have hitherto been locked in England,

* "The Isle of Man Times and General Advertiser," Nov. 17, 1883. In the same debate a member of the House of Keys, in favour of the importation of a man from Scotland and the exportation of Dr. Wood, said—"Nothing which I have listened to throughout a discussion, which must be exhaustive if ever a discussion deserved that character, has materially altered the opinion I have long held with regard to Dr. Wood, viz., that he is an able, humane, conscientious and honourable man."

† Dr. Wood was recommended to the asylum authorities, as medical superintendent, by the English Board of Lunacy. (*See* Asylum Report, 1876.)

and are still in many places in Scotland, but if you don't lock the doors you do what is the same thing—you put a warder near so that the patients cannot get out whenever they wish, for to suppose they can go wherever they please, many of them being most anxious to escape, is not the case anywhere. . . . But supposing the Committee wish it to be so, there is nothing to prevent the Committee informing Dr. Wood that in future they wish him to take the locks off the doors. Was he to be dismissed because he did not carry out the Scotch system of open doors?"

These observations appear to us to be unanswerable, and, as a matter of fact, they were unanswered.

We pass from them to the still more important protest of his Excellency the Governor of the Island. It is a protest of more than ephemeral interest, for it applies to all similar acts which may be committed by factious Committees and tyrannical Boards. It merits wide circulation. We have space for only a few paragraphs from his Excellency's letter to the Chairman of the Committee of Management (Sept. 10, 1883), the whole of which does infinite credit to his common-sense as well as his good feeling.

Mr. Walpole writes: "I do not understand that in making this communication to Dr. Wood you were authorised to state to him any grounds for his removal from office; and I understood you—when I asked you myself what these grounds were—to state that the Committee had an impression that Dr. Wood was opposed to the views of the Committee, and would not loyally carry them out. I at once admit that if the apprehensions of the Committee proved correct, and Dr. Wood were to prove reluctant to carry out its policy, it would be the duty of the Committee to remove him from his office. But I do not understand from you that Dr. Wood has in any way declined to carry out the wishes of the Committee in any respect—on the contrary, it is almost impossible that he can have done so. The Committee, I need hardly remind you, has only been some six weeks in office. Its most important member, the Chairman, has almost throughout this period been absent from the Island; and it is unreasonable to suppose that Dr. Wood has had even an opportunity of refusing to carry out the policy of the Committee, or of thwarting the Committee in any way. If this be so, however, the action of the Committee seems to me fatal to the best interests of the Asylum of the Island, and of the cause of good government.

"Nothing has done so much to promote the cause of good government in the United Kingdom as the knowledge that a change of Ministry would not involve a change in the permanent officials of the Government. Nothing has done so much to injure the cause of good government in the United States as the knowledge that the permanent officials were liable to arbitrary removal by each incoming President, yet the Committee of the Asylum is introducing a system which has produced endless confusion in America . . . and are abandoning, without cause, or without any cause of which I have been informed, the system which has given stability to our own institutions. Such a decision, if it be acted on, can only lead to one result. It must prevent the best men from accepting service from the Insular Government. No one whose services are worth securing, or who has a reputation to lose, would accept office from a Committee which is merely elected for a year, if the succeeding Committee were at liberty to terminate an engagement without adequate reason."

The Governor thus ends his admirable letter:—"I trust that if the Committee will do me the favour of considering the arguments which I have used, its members will perceive the impolicy and injustice of carrying out its resolution, and that instead of doing so, it will at once take steps to consider the manner in which the asylum should, in future, be managed; and that it will give Dr. Wood the opportunity of carrying its decisions into effect."

In reply the Chairman fully admits that no opposition had been made by Dr. Wood to the proposed changes. "*Your Excellency is quite right in assuming,*" he says, "*that Dr. Wood has not declined to carry out anything suggested by us.*"

In spite, however, of the Governor's appeal to the Committee to retrace their steps and withdraw their unjust, and we had almost said childish resolution, the latter persisted in their action, and had even the hardihood to take credit to themselves for the manner in which they did it. Truly the tender mercies of certain people are cruel! The Chairman writes to the Governor:—"The Committee think it right to observe that in any action as yet taken under the resolution in question, every consideration has been shown for the feelings and interest (!) of Dr. Wood. By suggesting to him to resign voluntarily instead of obliging him to leave under formal notice on the ground of general or specific unsuitability, the Committee think they were consulting Dr. Wood's interest."

To Dr. Wood's fitness for the post he held, Dr. Clouston renders testimony. When speaking in his "Report" of the bad and good points of the construction of the asylum of the Isle of Man, he asserts that "Dr. Wood has made the best of it" (p. 8). Under "Management of the Asylum" Dr. Clouston emphatically says, "The management of the asylum impressed me as admirable, especially under the great difficulties Dr. Wood and the staff have had to contend against through overcrowding. . . . The wards were bright in colour, clean, and well ventilated, and the dormitories neat, airy, and comfortable. The patients were neatly and comfortably clothed, and were generally quiet, and well cared for. The dinner I saw served was abundant and well cooked" (p. 16). "The former dietary scale was one more in accordance with the ordinary diet of some parts of England than of the inhabitants of this island. Dr. Wood has drawn out most elaborate and valuable tables in regard to the dietary, showing its present nutritive value, so I agree with the proposals laid down in those tables" (*l. c.*). Lastly, under the head of "Private Patients," Dr. Clouston, observes, "With an energetic doctor, of good medical reputation like Dr. Wood, there would be little fear of non-success in the Isle of Man" (p. 21).

We judge, therefore, from the printed documents before us, that a great wrong has been done not only to Dr. Wood, but to the just interests of medical superintendents in general. Such groundless acts and high-handed proceedings must shake the confidence of men holding this position in their tenure of office, however conscientiously they may discharge their duties. A change of Committee, some new fad or sudden freak, or love of change, may remove a valuable public servant from a post which he has held for years with credit. No man who has regard to his good name and honour will care to hold such a position, and no honourable man will take it, when it becomes vacant under such circumstances. So long as it is otherwise, so long will asylum-superintendents be liable to such action as that which seems good to a Manx Committee.

We offer to Dr. Wood our sincere sympathy for the unjustifiable manner in which he has been dismissed from service, but he may rest satisfied that every unprejudiced person who reads the undisputed facts of the history of this unfortunate affair, will not only acquit him of blame, but will regard the action of the leaders of the movement, which has

terminated so unhappily, as little less than scandalous, and deserving the reprobation of all who desire to see justice done to an honourable class of men entrusted with most responsible and anxious duties. He may also rest assured that when party-feeling has subsided, and a dispassionate judgment is formed of the whole transaction, many of those who have been carried away by misrepresentation will recall their verdict with regret, and unite in the opinion publicly expressed by His Excellency the Governor in favour of the late Superintendent of the Isle of Man Asylum.

Note.—We think it due to Dr. Clouston to append a letter written by him to Dr. Wood after his enforced resignation :—

Tipperlinn House,
Morningside Place,
Edinburgh.
Dec. 9, 1883.

Dear Dr. Wood,

I have hitherto not expressed to you my opinion in regard to your treatment by the Asylum Committee because I thought it might do more harm than good, and I had a lingering hope that justice might prevail. I now beg leave most sincerely to sympathise with you, and to say that had I known the course things were to take, or the spirit that was to be manifested, I should never have had anything to do with the Isle of Man Asylum, my visit to which I now sincerely regret for your sake.

Not that I could alter my report had I to make it again, for all I said there was to the best of my belief and experience. Contrary to my first fear on that point I am assured on the most varied and unimpeachable authority that my visit and report have had nothing to do with your leaving your office, which I still think, as I expressed in that report, you have faithfully and successfully fulfilled.

There was not a word of truth in the newspaper paragraph that the Asylum Committee were in treaty with one of my assistants for your office.

My first news of your difficulties I received when I was asked to recommend a man, as you were said to have resigned, or to be about to resign. My immediate step on learning this was my letter to the Governor, which has been published. I then feared you had not been able conscientiously to agree with or carry out my views, and so had really resigned, or had been placed in some unpleasant position where resignation was the only way apparent to you out of the difficulty. I was greatly distressed, and offered to mediate. I never alluded to your successorship. Since reading the debate in the Tynwald Court no assistant of mine, or any man over whom I had influence, would have been recommended by me to go to the Isle of Man Asylum in present circumstances.

No other communications but those published, or to which I have referred, ever took place between the Committee or any member of it and me with reference to your resignation, or to the appointment of your successor.

I am, yours very faithfully,
T. S. Clouston.

Dr. Wood.

Reg. v. Strong.

At the Devon Spring Assizes, held at Exeter, January 25th, William Strong was charged with receiving lunatics into his house without a licence. The following is from "The Exeter and Plymouth Gazette," January 26th, 1884:—

AN UNLICENSED ASYLUM.

William Strong, 70, farmer, of Huxbeare Barton, Hennock, near Chudleigh (on bail), was indicted for receiving to board and lodge in his house, on the 13th December, two or more lunatics, not being licensed for the reception of the same.

Mr. Collins, Q.C., and Mr. Bucknill prosecuted on behalf of the Lunacy Commissioners, and Mr. Pitt-Lewis defended.

The defendant pleaded guilty.

Mr. Collins said that the defendant could not plead ignorance of the law, for in 1880 he applied at the Quarter Sessions for a licence to keep lunatics, but it was not granted, and the application was not proceeded with. On the 20th February, 1880, he received into his house a certified lunatic named Steele. In December last certain reports reached the authorities, and the Lunacy Commissioners sent Dr. Phillips to examine the premises. He found no less than seven lunatics in the house, including a clergyman and two or three females. The defendant's house was a large, fairly-furnished farmhouse, and it was clean and apparently comfortable. There was not the slightest idea that any of these people were ill-treated; in fact they appeared to be well cared for, and they said that they were well fed and sorry to be taken away. The Lunacy Commissioners, however, considered this a very serious offence indeed, for after the defendant had applied for a licence and it had been refused, in defiance of the law he took six or seven lunatics in. He was instructed to ask that the defendant should not be imprisoned, but that if the Court should think fit to let him off with a fine the Commissioners would be satisfied.

Mr. Pitt-Lewis admitted that the licence was refused, although not upon any personal objection to his client, but upon general grounds that it was not desirable to multiply such houses. The defendant only intended his house for persons in a nervous and depressed state of mind, and the great majority of the patients were recommended to him by medical men, and were sent for the purpose of obtaining a change, rest, and quietness. He promised to send away all the lunatics, and had made an endeavour to get rid of at least one before the Commissioners interfered. For fifty years previous to 1880 the defendant lived at Stockleigh Pomeroy, and he produced a memorial, strongly in his favour, from the inhabitants, including two Vicars in the neighbourhood and three medical men. Everybody agreed that the patients were well looked after, and as one of them was certified,

the Lunacy Commissioners had a right to visit the premises whenever they chose.

His Lordship (Mr. Justice Cave) said that it was strongly in the defendant's favour that the house was well conducted, and that the inmates were treated with great kindness, care, and attention. The object of the Act was, of course, to ensure that such persons should be under proper supervision, as a precaution to their well-being, and to ensure that, as far as might be, they should be cured. It appeared that the defendant had done nothing opposed to that view of the Legislature. If there had been any suspicion of the slightest ill-treatment, or even of neglect, or if it had been shown that the house was not sufficient and proper, he should have felt bound to impose either a heavy pecuniary penalty, or if the case had been grave, a considerable term of imprisonment. But under the circumstances, and the defendant having undertaken to get rid of the persons still remaining in his care, the requirements of justice would be met if he now set him at liberty to come up upon his own recognizances of £20 when called upon. If there was any improper delay in sending away the patients of which the Commissioners might fairly complain, or if there was any repetition of the offence to which he had now pleaded guilty, he would undoubtedly be called up to receive judgment.

Mr. Collins asked for the costs of the prosecution; but his Lordship thought that it would be sufficient punishment for the defendant to pay his own costs.

This trial has occasioned considerable animadversion on account of the lenient manner in which the defendant, Mr. Strong, was dealt with. The man's age, and the way in which the patients had been treated, rendered imprisonment out of the question. It is difficult, however, to see why the man should be allowed to escape without a fine, as he had deliberately broken the law. Still more inexplicable is it that he should not have been made to pay the costs. A very pleasant Judge must Mr. Justice Cave be—for the defaulter. From some of the newspaper statements the Commissioners would appear to have been wanting in their duty in pressing the charge and penalty, but they undoubtedly asked through their counsel that he should be fined, and we do not think they would have been wise to do more.

PART II.—REVIEWS.

Insanity: Its Classification, Diagnosis, and Treatment. A Manual for Students and Practitioners of Medicine. By E. C. Spitzka, M.D. New York: Bermingham and Co., 1883.

This is an octavo volume of about four hundred pages, and the general style of the book gives a favourable impression. The author implies in the preface that it is the first systematic treatise on insanity published in America since the days of Rush, a claim that is remarkable if it can be really established. However this may be, the work before us is fairly entitled to a high place amongst the recognised text-books, notwithstanding some defects, which are only the more conspicuous from the general excellence of the matter in which they are found.

The work is divided into three parts. The first treats of the General Characters and the Classification of Insanity; the second, of the Special Forms of Insanity; and the third, of Insanity in its Practical Relations.

In the opening chapter a definition of insanity is given, which, though it is representative of the meaning of the word, is, nevertheless, so long and so cumbersome that it can scarcely be regarded as available for practical purposes. Here it is: "Insanity is either the inability of the individual to correctly register and reproduce impressions (and conceptions based on these) in sufficient number and intensity to serve as guides to actions in harmony with the individual's age, circumstances, and surroundings, and to limit himself to the registration as subjective realities of impressions transmitted by the peripheral organs of sensation; or the failure to properly co-ordinate such impressions, and to thereon frame logical conclusions and actions: these inabilities and failures being in every instance considered as excluding the ordinary influence of sleep, trance, somnambulism, the common manifestations of the general neuroses, such as epilepsy, hysteria, and chorea, of febrile delirium, coma, acute intoxications, intense mental pre-occupation, and the ordinary immediate effects of nervous shock and injury." It may be remarked, in passing, that the manner of excluding febrile delirium and the other congeners of insanity by name instead of by their qualities is peculiar, and is certainly not in accordance with the requirements of scientific definition.

In regard to delusions, the author very properly lays much stress on the difference between systematized and unsystematized delusions, those that have a pseudo-logical organization and those that have no organic cohesion. This distinction occupies a more prominent position in the writings of Continental authors than is accorded to it by most English writers. It serves, nevertheless, as an almost indispensable guide both in diagnosis and in prognosis.

The frequency with which pathological conditions of the brain can be recognised after death in cases of insanity according to the experience of the author and of other writers is summarised roughly as follows: In acute melancholia, almost zero; in true and recent mania and in monomania, about 5 per cent.; in epileptic insanity, about 20 per cent. In terminal states about 60, in imbecility and idiocy 80, and in paretic dementia (general paralysis of the insane) upwards of 99 per cent. These figures are, of course, given only as approximate, but probably they come very near the mark. With the exception of general paralysis, however, there is little characteristic in the morbid anatomy of any of these forms of insanity.

Perhaps the most interesting chapter in the first portion of the book is that on classification. The author remarks that though in France, Germany, and the Continent generally, the proper classification of insanity is approaching perfection, it is in England and America still in a chaotic condition. While there are only slight differences between the classifications of the best foreign writers, and the general principle is the same, only confusion can result from comparing the systems of English and American writers. The author's classification is based on that of Krafft-Ebing, or, perhaps might more correctly be said to bear a general resemblance to it. We give it here in tabular form.

Insanity.

Group First. Pure Insanities.

Sub-Group A.

Simple insanity, not essentially the manifestation of a constitutional neurotic condition.

First Class.

Not associated with demonstrable active organic changes of the brain.

I. Division. Attacking the individual irrespective of the physiological periods.

a Order. Of primary origin.

Sub-Order A. Characterised by a fundamental emotional disturbance.

Genus 1. Of a pleasurable and expansive character. (*Simple Mania.*)

Genus 2. Of a painful character. (*Simple Melancholia.*)

Genus 3. Of a pathetic character. (*Katatonia.*)

Genus 4. Of an explosive transitory kind. (*Transitory Frenzy.*)

Sub-Order B. Not characterised by a fundamental emotional disturbance.

Genus 5. With simple impairment or abolition of mental energy. (*Stuporous Insanity.*)

Genus 6. With confusional delirium. (*Primary Confusional Insanity.*)

Genus 7. With uncomplicated progressive mental impairment. (*Primary Deterioration.*)

β Order. Of secondary origin.

Genus 8. *Secondary Confusional Insanity.*

Genus 9. *Terminal Dementia.*

II. Division. Attacking the individual in essential connection with the developmental or involutional periods (a single order.)

Genus 10. With senile involution. (*Senile Dementia.*)

Genus 11. With the period of puberty. (*Insanity of Pubescence*, Hebephrenia.)

Second Class.

Associated with demonstrable active organic changes of the brain. (Orders coincide with genera.)

Genus 12. Which are diffuse in distribution, primarily vaso-motor in origin, chronic in course, and destructive in their results. (*Paretic Dementia.*)*

Genus 13. Having the specific luetic character. (*Syphilitic Dementia.*)

Genus 14. Of the kind ordinarily encountered by the neurologist, such as encephalo-malacia, hæmorrhage, neoplasms, meningitis, parasites, &c. (*Dementia from Coarse Brain Disease.*)

Genus 15. Which are primarily congestive in character,

* General paralysis of the insane.

and furibund in development. (*Delirium Grave,* Acute Delirium, *Manie grave.*)

SUB-GROUP B.

Constitutional insanity, essentially the expression of a continuous neurotic condition.

THIRD CLASS.

Dependent on the great neuroses (orders and genera coincide).

I. DIVISION. The toxic neuroses.

Genus 16. Due to alcoholic abuse. (*Alcoholic Insanity.*)

(Analogous forms, such as those due to abuse of opium, the bromides, and chloral, need not be enumerated here, owing to their rarity.)

II. DIVISION. The natural neuroses.

Genus 17. The hysterical neurosis. (*Hysterical Insanity.*)

Genus 18. The epileptic neurosis. (*Epileptic Insanity.*)

FOURTH CLASS.

Independent of the great neuroses (representing a single order.)

Genus 19. In periodical exacerbations. (*Periodical Insanity.*)

Order: Arrested development { Genus 20. *Idiocy and Imbecility.* Genus 21. *Cretinism.*

Genus 22. Manifesting itself in primary dissociation of the mental elements, or in a failure of the logical inhibitory power, or of both. (*Monomania.*)

SECOND GROUP. COMPLICATING INSANITIES.

These may be divided into the following main orders, which, as a general thing, are at the same time genera:—*Traumatic, Choreic, Post-febrile, Rheumatic, Gouty, Phthisical, Sympathetic, Pellagrous.*

This classification, like every other, is open to many objections, several of which are examined in detail by the author. It is impossible, in the course of a short review, to go into the defects and into the justification of the scheme; but on the whole it may be said to be quite as good as any of its rivals, and better than most of them.

The second portion of the work is devoted to the description in full of the special forms of insanity. The clinical

pictures leave little to be desired. As a rule they are full, clear, and accurate. A few points may be briefly noticed.

Katatonia, a recently differentiated form of insanity, is noticed. It was first described, about eight years ago, by Kahlbaum, of Görlitz, and since then it has been studied by Kiernan and others. The chief features are an initial stage of depression, followed by an almost cyclical alternation of atony, accompanied by a cataleptoid state, excitement marked by a parade of pathos or by a theatrical manner, and then again confusion and depression. Kahlbaum takes a favourable view of the prognosis. Spitzka's experience points to dementia as the termination, for, although after one or two cycles the patient can generally be discharged from the asylum recovered, relapses occur in the majority of cases.

Monomania is adopted as an equivalent of the French *monomanie*, and of the German *primäre Verrücktheit*, to represent all the systematized insanities. The group includes cases of "imperative conceptions" and cases where the delusions have an organized coherence and a pseudo-logical basis.

The third division of the work deals with the practical relations of insanity. In the chapters on "How to Examine the Insane" and "The Differential Diagnosis of the Forms of Insanity" there are a good many hints that will prove useful to a young practitioner.

There are some omissions which should not occur in a text-book purporting to give a complete account of the subject. The most obvious one is that the second group of insanities, or the complicating forms, are hardly even mentioned, much less described, though their position in the tabular classification would lead one to expect that they would at least receive some little attention. Masturbatic insanity, too, a tolerably well-marked clinical variety, is not recognised; and we are told that a form of mental deterioration occurring in masturbators, a kind of "primary dementia," is the only one to which the term "insanity of masturbation" can be properly applied.

In regard to the author's style, the remark may be made that, though generally lucid, it is not always elegant. Nevertheless, the writing is, on the whole, pleasant reading. At the same time, not much effort would have been necessary to find words better fitted than "artefacta," "abulia," "hyperbulia," "verbigeration," and many others to put the student

in possession of his teacher's meaning. The author speaks, too, of the "fundament" of insane thought. This is, of course, not absolutely incorrect; but the word might, we think, be allowed to remain in undisturbed possession of the more useful, though less scientific, meaning ordinarily belonging to it.

If there is throughout the work a somewhat dogmatic tone, this may be admitted to have a certain merit in a text-book. So far, however, as there is anything like bitterness of spirit in the criticisms that the author makes upon other American alienists, it is matter for regret, and can be regarded only as a blot in a meritorious book.

Whatever may be its defects, the work is a good one, and we heartily wish it success.

W. R. H.

Diseases of the Brain and Spinal Cord. By David Drummond, M.A., M.D.

Having read this book from board to board, we can honestly recommend it to the portion of the profession for whom it has been prepared.

In his preface Dr. Drummond makes it to be clearly understood that his work does not aim at being an exhaustive treatise, but only a text-book for the instruction of students and busy practitioners. He is, therefore, to be congratulated that he has produced what he intended. There are abundant internal evidences that he is, by reading and observation, familiar with his subject, and that he must have been frequently tempted, whilst engaged on his book, to enlarge on specially interesting or difficult topics. But he has resisted these temptations, and, without sacrificing clearness, has put into a short though readable form as much information as could be expected.

At this time of day it is not necessary to review such a book at great length. The topics with which it deals are to be found in all the well-known books on nervous diseases, and if asylum-physicians are not familiar with them, they should be; and we can strongly recommend Dr. Drummond's book for anyone anxious to learn what is known about them.

An admirable feature is the copious index. It has been said that a good book cannot be too concise in its substance, nor too full in the table of contents. In both these respects Dr. Drummond's book is to be commended. It need only be

added that a chapter, written by a specialist, on General Paralysis of the Insane, has been inserted. This is as it should be, as general practitioners have few opportunities, either at college or in text-books, of learning anything of this most important disease.

A Manual of Psychological Medicine and Allied Nervous Diseases. By EDWARD C. MANN, M.D. Philadelphia: Blakiston. 1883. London: J. and A. Churchill.

This ponderous book does not call for a lengthened notice. Though there is a good deal of valuable work in it (mainly extracts from other writers), the author has failed to give it scientific form. Undigested lumps, so to speak, of the most diverse qualities are mixed up with a menstruum so thin as to be devoid of solvent action. In an appendix there is a carefully prepared abstract of the laws relating to the care of the insane in the various states of the Union by the author's brother. We had almost forgotten to thank Dr. Mann for one original statement. At least we confess that it is quite new to us. "Pyschological Medicine" is, he informs us, a "Nervous Disease." W. R. H.

Insanity Considered in its Medico-Legal Relations. By T. R. BUCKHAM, A.M., M.D. Philadelphia: Lippincott. 1883.

Such is the anomalous state of the law in regard to insanity both in this country and in America, and so generally are these imperfections recognized that any author dealing with the subject can hardly fail to make a number of irrefutable criticisms and of useful suggestions. It may further be said that law is so rebellious to amendment, and custom is so sturdily opposed to reform, that any fair attempt to bring them into conformity with science deserves a hearty welcome. The work before us, whatever may be its demerits, is at least such an attempt. The chief objects the author had in view "were to point out the pernicious uncertainty of verdicts in insanity trials, with the hope that by arousing attention to the magnitude of the evil, at least some of the more objectionable features of our medical jurisprudence may be removed; to faithfully call attention to the more prominent causes of that uncertainty;" "and with the most friendly feelings for both my own and the legal profession, to criticize severely, and to censure when necessary, not the individuals, but the system which has

made insanity trials a reproach to courts, lawyers, and the medical profession."

The work consists of five chapters and an appendix. The first chapter is introductory, and is intended to clear the ground more or less. The next three chapters expound different theories of insanity. The fifth and last chapter, and perhaps also the most important, is upon experts. The appendix gives a large number of extracts from judges' speeches.

At the outset Dr. Buckham has little difficulty in showing that "underlying the whole subject of the jurisprudence of insanity, as a potent cause of the uncertainty of verdicts, is the fact that the real premises are imperfectly understood. At every trial the question, 'What *is* insanity?' is reiterated, and no definition has yet been furnished that commands general credence and acceptance. The opinions of the courts as expressed in their rulings and charges to juries are contradictory one of another, and physicians called to testify as experts exhibit in their evidence anything but uniformity of opinion."

The author's efforts towards a better state of things in this direction do not appear to have much value except for the antiquary of generations to come. The gist of Dr. Buckham's exposition is this: There are three prominent theories of insanity, namely, the psychical or metaphysical theory; the somatic or materialistic theory; and the intermediate theory of Messrs. Wharton and Stillé. But these theories are all either imperfect or absolutely wrong; and the only theory in accordance with all the facts is the author's own, the "physical media" theory. This theory might be described shortly as the somatic or materialistic view with a saving clause for the "freedom of the will." Like the metaphysical theory, however, it "regards the mind as a distinct, intangible, incorporeal entity, not dependent upon the body for its existence; but, unlike the 'Metaphysical Theory,' it recognises the most intimate relations between mind and body, and holds that in this life the mind is *wholly dependent* for the manifestations of its operations on certain organs of the body which we designate '*physical media.*'" It treats insanity as a physical disease; "hence in that most important respect, in their 'medico-legal relations,' there is no *practical* difference between" it and the somatic theory. The mind, according to the author's showing, is on much more intimate terms with the body in his theory than in the intermediate theory; nevertheless the "freedom of the will,"

dragged in by machinery, is introduced to avert the "absolute irresponsibility" that would flow from the somatic view. Whereas had the author rightly understood the doctrine he attempts to controvert he would have perceived that his machinery was unnecessary.

A definition of insanity is given:—"A DISEASED OR DISORDERED CONDITION OR MALFORMATION OF THE PHYSICAL ORGANS THROUGH WHICH THE MIND RECEIVES IMPRESSIONS, OR MANIFESTS ITS OPERATIONS, BY WHICH THE WILL AND JUDGMENT ARE IMPAIRED AND THE CONDUCT RENDERED IRRATIONAL. And as a corollary we offer: *Insanity being the result of physical disease,* IT IS A MATTER OF FACT *to be determined by medical experts* NOT A MATTER OF LAW *to be decided by legal tests and maxims.*"

In the chapter on experts, it is suggested that superintendents of asylums and assistant superintendents should, as a condition of appointment, pass an examination in law, medicine, and psychology before a specially constituted Board. That only such men after a certain number of years' experience should act as experts in insanity trials, and that it should be part of their duty to do so without payment and only on behalf of the Court; that the fact of insanity should be held to be proved by the testimony of the expert without being subject to legal tests.

The appendix contains an array of judges' opinions; from which it will be seen that there is hardly a theory of insanity that has not been upheld by some luminary of justice.

The size of the book is somewhat disproportionate to the amount of matter contained therein. If the type and the spaces between the lines were reduced to ordinary dimensions the volume would be smaller by one half. Italics and capitals are used with a frequency, not only far from elegant, but to an extent which almost deprives them of emphasis.

W. R. H.

Clinical Lectures on Mental Diseases. By T. S. CLOUSTON, M.D., F.R.C.P.Ed. J. and A. Churchill, London.

We shall defer till our next number a full review of this most important book, and at the present time desire only to call the attention of our readers to the fact that an undoubtedly good book has appeared bearing the characters of a clinical guide. It is easier in many respects to write a series of clinical lectures than to prepare a manual, and in

many ways the writer of the former has the pleasanter task, as he is bound by no hard and fast lines, and can divide his subject as he pleases.

Dr. Clouston has been a lecturer on disorders of the mind for years, and has won a high position from his eminently practical and useful teaching; and both old students at Edinburgh and others will be glad to have so pleasantly placed before them the ripe experience of a practised teacher.

The book is handy in shape, clear in type, pleasant in style, and characteristic of the author. It consists of nineteen lectures, which range from the clinical study of "mental diseases" to the legal and social relationship of both patient and doctor.

We shall later discuss the subjects handled and the general divisions followed. And we shall not be altogether satisfied with the introduction of new terms, which cannot be considered as final expressions of the knowledge of insanity, and add, we think, still more to the burdens of psychological terminology. In the meantime, we trust our readers will study the book and compare their judgment with ours.

The Extra Pharmacopœia of Unofficial Drugs and Chemical and Pharmaceutical Preparations. By WILLIAM MARTINDALE, F.C.S. *With References to their Use Abstracted from the Medical Journals and a Therapeutic Index of Diseases and Symptoms.* By W. WYNN WESTCOTT, M.B. 2nd Ed. London: H. K. Lewis, 1884.

One of the chief features of the progress of medicine in recent years has been the advance in therapeutics. Not merely is there a constant in-pour of new drugs, but owing to experimental investigation, their actions are more precisely known than were the actions of the most frequently used medicines twenty years ago. To those who wish for a very concise account of what has been done of late in this department the little book before us is a treasure.

The arrangement is alphabetical. All the new drugs and nearly all the old ones are to be found with terse statements of pharmaceutical and medicinal properties and non-officinal formulæ. The very brief abstracts from medical journals, which represent an enormous amount of work, are well done, and are valuable besides for reference.

The first edition was exhausted in a few weeks. We advise all our readers to possess themselves of a copy.

Ueber die Gesetze des Periodischen Irreseins und Verwandter Nervenzustände. Von SANITÄTSRATH DR. KOSTER, Director der Provincial Irrenanstalt, St. Johannes Hospital, zu Marsberg. Bonn, 1882.

Periodicity is an undoubted fact, both in healthy and in morbid processes, in epidemics as well as in chronic diseases; and many experienced physicians have noticed the simultaneous or periodical appearance of rare diseases or states of health. The regular recurrence of fits of excitement and calm has been used to mark and give a name to a periodical form of insanity. Dr. Koster, who has for years made a study of periodicity in insanity, and accumulated a number of careful observations, has observed the recurrence of regular periods even in chronic insanity. He has diligently noted the length of the remissions or lucid intervals in mania, melancholia, epileptic insanity, and other recurrent forms, and finds that the number of days is generally divisible by seven. This is because the return of the perigée when the moon is nearest the earth, generally takes place in 28 days, and if one multiplies seven by four no candid reader will deny that the product is 28. It is true that in dividing his periods of calm and excitement by seven there is often a remainder of one or two days, but this is because the moon sometimes takes a day or two longer between its perigée and apogée, and if that satellite will not observe a due regard to regularity, can one expect more of the behaviour of the lunatics under its influence? Dr. Koster thinks that the moon acts indirectly upon the insane by modifying the magnetism of the earth, and quotes a number of astronomers, whose opinions are somewhat carefully worded, but who evidently regard it as possible that the moon and also the sun may have an influence upon the paroxysms and relapses of human feeling and passion. No doubt the cyclical, physiological, and pathological variations in the human constitution are dependent upon causes which act at regular periods. These are possibly owing to changes in the great masses of matter which revolve through space in cycles of such astonishing regularity, and it may be that in time we shall be able to make out connections of cause and effect less fanciful than those of the astrologers, who so laboriously constructed a system of influences which remain recorded in old parchment-bound volumes.

In the meantime we think the principal value of the

studies of the learned Sanitätsrath consists in his careful observations on the prevalence of periodicity in all forms of mental derangement. However, it is likely enough that a new means of inquiry and analysis may give us the clue which the astrologers failed to find.

The Relations of Mind and Brain. By HENRY CALDERWOOD, LL.D., Professor of Moral Philosophy, University of Edinburgh. 2nd edition, 1884. London: Macmillan and Co.

We reviewed the first edition of this work in the Journal for April, 1880, at some length, and while unable to follow the author in all his contentions, we accorded him praise for many valuable qualities. This edition has been carefully revised, and a new chapter has been added on "Animal Intelligence." Altogether this volume is augmented to the extent of seventy pages. The author's conclusion, expressed in the new chapter, is that "Animal Intelligence is only a higher form of sensori-motor activity, in which the action of the special senses operates in conjunction with co-ordinated cerebral centres communicating with the muscular system. . . . All that is concerned with a higher intelligence, whose natural function it is to seek the interpretation of sensory impressions, and to govern activity on principles of conduct superior to the impulses of the sensory apparatus, lies quite beyond the region of investigation now explored. To some physiologists it appears as if it were a comparatively narrow and insignificant region of inquiry which lies beyond the line to which we have now advanced. But human history is against this representation. . . . All that is grandest in human life remains unaccounted for by physiological science. The animal life of man is explained; but resting on this explanation, human life itself stands unexplained—a physiological mystery" (p. 288).

We refer our readers to Dr. Calderwood's work to decide for themselves how far the author supports his position with success in the ably marshalled arguments with which this edition is fortified. The general position taken by the writer is, of course, the same as before, and to that the observations we formerly made still apply. We need not repeat them. We would now only say that nothing but good can result from the fair and lucid way in which the views advocated in this volume are set forth, whether they

produce conviction or not. It is no better for the physiological than for the theological mind to have dogmas presented to it in only one aspect.

Traité des Névroses. Par A. Axenfeld, Professeur de Pathologie, Interne à la Faculté de Médecine de Paris. 2me Edit. Par Henri Huchard, Lauréat de l'Académie et de la Faculté de Médecine de Paris. Paris: Germer Baillière et Cie. 1883.

This edition, increased in size by 700 pages, extends now to nearly 2,000. We cannot do more than commend the care which has been taken with this work. The amount of labour expended in the bibliography alone is enormous. The chapters on epilepsy, chorea and hysteria, especially the last named, are very complete, and will be found very instructive. There is a considerable amount of matter in reference to hypnotism and catalepsy, but we are surprised to find nothing in this connection about spontaneous somnambulism.

M. Huchard has edited the work of his late master, who died in 1876, with conscientious and constant regard to the advance made in the knowledge of nervous affections since the former edition appeared.

Record of Family Faculties, Consisting of Tabular Forms and Directions for entering Data, with an Explanatory Preface. By Francis Galton, F.R.S. London: Macmillan and Co. 1884.

The zealous perseverance which marks Mr. Galton's labours is again exemplified in this publication. We bring it under the notice of our readers, who ought to be specially interested in a book "designed for those who care to forecast the mental and bodily faculties of their children, and to further the science of heredity," and hope that they will aid its circulation by every means within their power.

Mr. Galton offers £500 in prizes to British subjects in the United Kingdom who shall furnish him before May 15, 1884, with the best records from their own Family Records.

We cannot do more than re-echo his wish that his efforts to draw the attention of the public to the utility of family

records, and to collect materials for a really scientific study, will be taken in good part, and in the spirit in which Mr. Galton has made them.

Leçons sur les Maladies Mentales. Par B. Ball, Professeur à la Faculté de Médecine de Paris. Paris: Asselin et Cie. 1883.

To the earlier portion of this volume, which appeared as a separate fasciculus, we have had occasion to refer in a former number. The complete work is quite worthy of the ability of the author, and the style is at once forcible and graceful. There are many passages which we should gladly transfer to our pages, but the space at our command will not allow us to do more than praise the book much and cite from it little.

Dr. Ball gives, like everyone else, his own classification of mental diseases, and this we append. Following Morel, he bases it upon ætiology.

Mental Disorders.

1. Vesaniæ.* No lesion discovered. "Essential."

(*Types*—Circular Insanity; Partial Insanity.)

2. Neuro-pathic	Hysterical Insanity Epileptic Insanity Choreic Insanity
3. Diathetic	Gouty Insanity Rheumatic Insanity Tubercular Insanity Cancerous Insanity Anæmic Insanity
4. Sympathetic	Genital Insanity Cardiac Insanity Gastro-intestinal Insanity Pulmonary Insanity
5. Toxic	Alcoholic Insanity Saturnine Insanity Morphinic Insanity Etc.

* Insanities properly so called.

6. Organic or cerebro-spinal	General Paralysis Aphasia Acute delirious mania Hemiplegic dementia Etc.
7. Congenital or morphological................	Idiocy Imbecility Cretinism

It would be easy to criticise, and we have little doubt that were we to do so, the Professor would be the first to assent to our criticisms.

The author gives unqualified adhesion to the Moral Insanity of Prichard as "*un véritable délire.*"

It is to be regretted that there is no alphabetical index to the book—an essential condition of a book of nearly 900 pages. We have given up in despair the attempt to find some passages which had struck us on first reading the book, and which we wished to recall.

A Practical Introduction to Medical Electricity. By A. de Watteville, M.A., M.D., B.Sc.Lond. 2nd edition. London: H. K. Lewis. 1884.

We are glad to see that this excellent introduction to Medical Electricity has reached a second edition. The work is thoroughly practical, and well deserves the success it has achieved. It has been much enlarged, and very useful plates have been added, illustrating the localities of the chief nerve trunks and motor points of muscles accessible to electrical excitement. In the chapter on Electrotherapeutics, Dr. de Watteville has eliminated the translation of the portion written by Dr. Onimus and substituted his.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *English Retrospect.*

Asylum Reports for 1882.

To write a good asylum report appears to be a really difficult task for the average superintendent. It should not be so. He is favoured by his brother superintendents in this and other countries with their efforts in the same line, and if he has not the literary qualifications to write a neat, concise and grammatical report, he might obtain useful hints from them. The old-fashioned report was in many cases a most able essay, but perhaps wasted or nearly so, as reports once read are apt to be forgotten, and the facts and observations, often of great value, are unavailable for the instruction of a rising generation. If essays on asylum management, or records of interesting cases, are of transient value when they appear in an annual report, they can be published in our own or some other medical journal, where they will be available for reference when the present generation of asylum superintendents has disappeared. Whilst we are against the too elaborate essay of former days, we are more hostile to some of the crude productions of the present time. When the Visitors have read a few bald sentences containing nothing beyond what any intelligent person can understand by a cursory perusal of the statistical tables, these gentlemen are apt to conclude that their medical officer can write no better than a schoolboy, or that he considers it not worth his while to exert himself—either conclusion being most damaging to his position and reputation. What is worth doing is worth doing well; and any trouble taken in the production of a readable and instructive report, is well spent and is amply repaid by the approval of those to whom it is addressed. A neatly turned sentence has sometimes secured a good friend.

In preparing this notice, we have been in the habit of commenting on only those passages which struck us as specially deserving attention. Much to our surprise, we learn that some of our members feel that to be exempted from criticism or notice is nothing short of deliberate neglect. Now, we are above everything careful not to hurt anyone's feelings, and so in an attempt to please everybody we have set ourselves the task of saying something about every report which has been forwarded to us. Now this we have found really hard work, in some cases extremely so, but a determination to be conciliatory has overcome all difficulties; and even where we have felt compelled to mark a fault, how delicately has it been done, how gentle has been the criticism!

Aberdeen.—It is reported that "The Institution is at present

suffering from two serious disadvantages. The main building is greatly overcrowded, and the extent of land attached to the asylum is much too limited. These evils have now existed for a considerable time. Attempts have been made to relieve the overcrowding by successive additions to the building; but these have scarcely been sufficient to keep pace with the increasing demand for accommodation for pauper lunatics, and the present condition of the establishment has only been prevented from becoming much worse by the number of private patients having been reduced during the past three years from 171 to 147. No addition has recently been made to the amount of land attached to the asylum, and it is evident the insufficiency of its amount must have been aggravated with every addition to the number of inmates and the size of the buildings."

Argyll and Bute.—A determined effort was made in 1882 to keep down the accumulation of patients in the asylum by the discharge of 42 unrecovered cases. These were all sent to reside in private dwellings and very few were sent back as unsuitable. In spite of this the buildings are much overcrowded, and the additions are not ready for occupation.

One source of trouble has disappeared at Lochgilphead. It is reported by one of the Commissioners that "An important and very desirable change is about to be made in the relations of the farm to the asylum. It seems impossible that the existing arrangements could have long continued, but they have been brought to an end by the resignation of the Farm Manager. No further observations on this subject are deemed necessary, as the views of the General Board are well known as to the difficulty of obtaining a successful management with a divided responsibility." An asylum superintendent need not be a farm manager, but no person should reside on an asylum property who is not under his authority.

At Dr. Sibbald's visit the clothing of four men and four women, and also the bed coverings of three beds on the male side and three beds on the female side were weighed.

The following were the weights ascertained :—

Men's clothing	...	7½lb.,	8½lb.,	9½lb.,	10½lb.
Women's ,,	...	6½ ,,	6½ ,,	8¼ ,,	10 ,,
Male Bed coverings	...	15 ,,	16 ,,	17 ,,	
Female ,,	...	16 ,,	16 ,,	16½ ,,	

In Table III there are several mistakes in the percentages of deaths on the average numbers resident for 1882. They are so obvious that one is at a loss to account for them.

Barnwood House Hospital.—The management continues to be marked by great energy and enterprise.

The asylum farm has been taken over by the Committee and the results are already good. The additional accommodation provided for female patients is full, and applications for admission have frequently

to be refused. A villa with four acres of ground adjoining the asylum has been purchased, and can be readily made suitable for the reception of patients of the better class.

It is exceedingly satisfactory to learn that the Committee have continued to keep constantly in view the charitable and benevolent objects of the Institution. Fifty-five patients have been maintained at reduced rates throughout the year, most of them for payments largely below the actual cost of their maintenance. Many of them have also been supplied with clothes, wine, and other extras at the charge of the Institution.

The rules were revised and the Visitors took advantage of the opportunity to insert one for the pensioning of old and faithful dependents. They thought it would be wise to follow the principle laid down in the statutory regulations of county asylums.

Dr. Needham in his report deals somewhat in detail with the sanitary arrangements of the building. He also refers to a case in which a gentleman, seized by a sudden impulse, threw himself from a window and sustained injuries from which he recovered, but which might have been fatal.

Bedford, Hertford and Huntingdon.—An attendant sustained almost fatal injuries in an attack by a patient. As he is likely to be a confirmed invalid and quite unfit for further duty, the Committee granted him an annuity of £26.

Unless a very good reason can be given to the contrary, we are of opinion that the entry by the Commissioners should form a part of every annual report.

Berkshire, &c.—The attendants and nurses are now allowed uniform in addition to their wages.

Dr. Gilland reports that there is a growing tendency to pass pauper patients through workhouses on their way to the asylum. Thirty-six were so treated during the year. He adds, however, that it is so far satisfactory that fully one-third of the number were detained in the union for a few days only, and were removed to the asylum within a week.

Out of the total admissions for the year, 138, no fewer than 27 refused food so persistently that they required artificial feeding. This must be considered an unusually high proportion.

Bethlem Hospital.—For the first time this report appears without the documents referring to the King Edward's School, a charity administered by the same Governors.

There is continued evidence that every effort is made to render the hospital as beneficial as possible to the poorer middle classes.

Apropos of feeding, Dr. Savage remarks :—" Some superintendents say they never use the stomach pump or the nose tube ; I can believe them, but I question whether they may not be sacrificing something to this hobby of non-feeding. I feel with forcible feeding as I do about restraint that I should never use it as a mere saver of trouble ;

but if patients are likely to suffer by being held down, or if they would suffer from not taking enough food, or if they would be more harassed by spoon-feeding than by the use of the stomach-pump or nasal tube, I should in the one case restrain, and in the other feed. Forcible feeding has not, in my experience, the dangers or evils which have been credited to it. I have never seen a case in which food was sent into the air-passages instead of into the stomach. I have not found patients lose any self-respect after feeding; and though there is some danger of getting persons into the habit of being fed, I have myself never found this a danger which could not be avoided. I make it a rule, that if patients are not taking as much food as I think they should, and if they are losing flesh, to have them fed artificially for a time; by this means one can judge if the wasting is due to physical disease or simple starvation."

Dr. Savage is averse to the removal of Bethlem to a rural situation.

When the Commissioners visited in September, there were ten patients paying £2 2s. each per week.

Birmingham, Winson Green.—Many important structural improvements have been effected during the year, but they need not be detailed though some of them were urgently required. Asylum chaplains will be greatly alarmed to hear that "voluntary services have been given on Sunday afternoons by ministers of different denominations, and have been much appreciated by the patients." Conservative clergymen will think this inserting the thin edge of the wedge and they can have no difficulty in foreseeing the disestablishment and disendowment of their Church. Ah, Birmingham is certainly a terrible place.

Till we read it we did not believe that any asylum church was so far behind as to have in it a barrel organ. What can the services have been like, accompanied by such an instrument of torture. An American organ is bad, a harmonium is worse, but a barrel organ!

Rubery Hill.—This new asylum seems to be getting into thorough working order. From Dr. Lyle's report it is evident that he is adopting all the most approved methods of administration. The proportion of epileptics is large.

We would point out that in Table III the average number of women resident is given as 117, instead of 177 as in Table I.

No report by the Commissioners on the condition of the Birmingham asylums is given.

A clinical clerk is in residence at Winson Green, and it is proposed, at least the Visitors are quite agreeable, that the students attending the Birmingham medical school, should be instructed clinically in mental diseases in the wards of the borough asylums.

Beer is no longer an article of diet.

Bristol.—If additional land could be acquired, this asylum would be immediately enlarged, as it is now overcrowded.

Dr. Thompson holds out against the recommendation of the Commissioners that the epileptics should be under supervision at night. In thus refusing to do what is generally approved, we think he is, for his own comfort, wrong. "We can only repeat the remarks made by our colleagues in the previous entry, that should any patient die unattended from suffocation during an epileptic fit the Medical Superintendent will be directly responsible for a death which might have been prevented." When the Commissioners express such an opinion, we advise Dr. Thompson to give way. There is no use in presenting your adversary with a cudgel wherewith to break your own head.

Broadmoor, (1881).—The total admissions for the year were 64. and of these no fewer than 15 men and 6 women had taken life. Commenting on this fact, Dr. Orange says:—

"The first question that naturally arises in the mind is whether, out of so large a number, it would not have been possible to take measures beforehand, in some of the cases at least, to avert some portion of this serious loss of life. The majority of these 21 persons, who had committed homicide, had given indications of being mentally deranged, and of being, in consequence, dangerous persons to remain at large; and yet, either because of mistaken kindness, or through disinclination to run the risk of incurring the inconveniences which sometimes attend the adoption of the statutory means for placing persons in asylums, matters were allowed to run their course, and innocent lives were thus sacrificed. Another point of interest lies in determining the degree or extent to which these homicidal acts were the result of inebriety. But, interesting as this point undoubtedly is, it is one that is by no means easy of accurate settlement; and, in any investigation into this matter, it is necessary not to confound sequence with effect. That intemperance plays an important part in the production of insanity, either in the persons themselves who give way to this vice, or in their descendants, there can be no room whatever to doubt; but that it does not account for every case of insanity is certainly equally clear. Considering, first, the cases of the six women included in the list of homicides, it appears that there is no evidence of inebriety on the part of any of them; but that, on the other hand, causes, which appear to be adequate, and which were of an entirely different character, were found to have existed. With respect, however, to the 15 men, there was a clear history of intemperance in the cases of five; but it must be added that in the cases of four out of this number, there existed also insanity arising from other causes, such as hereditary predisposition, cranial injuries, or harassing and exhausting circumstances. One instance, therefore, only remains, of the 15 men, in which, apparently, the homicidal act was to be ascribed to a mental condition resulting from inebriety and from that alone. But, with respect to the four cases in which inebriety existed in combination with previous insanity, of different degrees of severity, resulting from other causes, it might be asked whether the homicidal

acts would have been committed if the perpetrators of them, although more or less insane even when sober, had not added the delirium of intoxication to the previously existing state of things. Whether this question could, or could not, be answered with a decided negative, it may, at any rate, be safely affirmed that whenever anyone, whose conduct has already given ground for suspecting the existence of mental derangement, begins to drink to excess, the danger to the community is, thereby, most certainly increased; and, therefore, all the greater promptitude should be used in placing such a one under restraint, without waiting to give him the opportunity of being arraigned on a charge of murder. The principle of respect for the liberty of the subject is a good one; but it is capable of being pushed too far, and it would certainly appear that this is done when it is carried to the point of non-interference with insane persons who have also become intemperate."

The report from which the above is an extract was delayed in its preparation by the serious assault committed on Dr. Orange. We can never think of this outrage without recalling the correspondence which appeared in the London papers as to the mental condition of the assailant. Perhaps those who so loudly declared their belief in his sanity, and, if we recollect rightly, offered to champion his case in the law courts, are now thoroughly convinced that they were mistaken in their diagnosis. It is greatly to be desired that such subjects should be discussed in the medical press alone, nor can it be doubted that the blunder which was made in this case, and which was so thoroughly advertised in the daily papers, must have done great damage by further shaking public confidence in the opinions of experts in mental cases.

Cambridgeshire, &c.—It is satisfactory to learn that improvements of various kinds continue to be carried out. The patients have so much increased in number that it has been necessary to transfer eight males to Northampton.

The rate of maintenance continues high—11s. 2½d. per week.

It is impossible to read this report without regret that Dr. Bacon was not spared to see the fruits of his labours. We all know how he struggled to establish a rational system of management at Fulbourne; and just as his efforts were beginning to bear much fruit, death removed him from the scene of his labours.

Carmarthen.—It is a perpetual puzzle to most superintendents to discover the secret of maintaining an asylum in creditable order and the patients in sufficient comfort at a weekly cost of 7s. 10½d. The Commissioners state that the dietary is low, but that it is not dangerously so is shown by the low death-rate which has existed for the past six years.

A second assistant medical officer has been appointed.

It is exceeding satisfactory to learn that every woman who can walk goes beyond the courts for exercise.

Dr. Hearder is in favour of discharging patients on probation. We see no advantage in the method. If a patient can be sent away from the asylum, he may as well be discharged outright. If the asylum authorities had any control over the patient during the period of probation, some benefit might possibly result, but as things are at present managed they are responsible for the patient and for the folly and ignorance of the relatives, and that is a burden quite unnecessary to be borne.

"An official inquiry has been made during the past year as to the working of the capitation grant, which was made in 1874. In several counties it has apparently had the effect of causing the removal to asylums of many cases which might, and would otherwise, have been cared for in workhouses. But it does not appear to have in any way influenced the character of the admissions from your district. Thus we find, that while in 1868 there were 25 lunatics in the workhouses of the three counties, in 1874 this number had increased only to 29. By January, 1875, however, immediately after the grant took effect, the number in workhouses rose to 46 ; and we further find that there has been since 1875 a continuous increase up to January, 1882, the latest date for which we have returns, when the number in workhouses was 95. During the same period the cases received here which might properly have been treated in a workhouse have been very few, as almost every case admitted into your asylum has been sent on account of violent or suicidal tendencies which have rendered special care an absolute necessity. During the fifteen years now under consideration the number of lunatics chargeable to unions within the three counties, including the boroughs of Carmarthen and Haverfordwest, has increased from 626 in 1868 to 905 in 1882. The number in your asylum has grown from 190 to 450, while the number residing with relatives and others has slightly decreased, having been 400 in 1868, it was 397 in 1882. Thus while less than 9 per cent. of the total lunatics of England and Wales are resident with relatives or others, in your district the proportion still amounts to over 40 per cent."

Cheshire. Chester.—The proportion of unfavourable cases is high. Of 75 deaths no fewer than 25 were due to general paralysis, five being women. Of 197 cases admitted no fewer than 45 died within the twelve months, while as many as 14 of these succumbed within one month.

Cumberland.—Dr. Campbell reviews his statistics for the past 10 years, and arranges his remarks under the following heads :—Is insanity increasing in the district ? Is the type of insanity changing? Is it possible to diminish insanity in the district ? We must content ourselves by remarking that he clearly shows that sudden prosperity in a district increases the cases of lunacy, especially amongst the uneducated and previously destitute.

Denbigh.—A large portion of the drains has been reconstructed on

an improved system. A hot-water heating apparatus has been introduced and works well, adding materially to the comfort of the patients.

Two members of the staff resigned on account of age and infirmity, and were granted superannuation allowances for life.

Since this report was written Dr. Williams has resigned, and has been succeeded by Dr. Llewelyn F. Cox.

Derby.—There are several subjects in this excellent report to which we would gladly refer did space permit; but it is enough to say that they all indicate thorough efficiency and a determination to keep up with the times. To obtain room for recent cases, several imbeciles and dements were sent to workhouses, but Dr. Lindsay reports that several have been sent back to the asylum on the ground that they were too troublesome in the workhouses, and required more supervision than the limited arrangements of the workhouse enabled them to get. The experience of the past year only tends to confirm his opinion that workhouses, as at present conducted, with their inadequately paid nursing staff, deficient arrangements and insufficient supervision, are not the most suitable places for the care and treatment of even harmless chronic and imbecile asylum patients, who often deteriorate in mental and physical condition, habits and conduct when removed from the better diet, exercise, discipline, more frequent supervision and better surroundings of the asylum to the workhouse.

Dr. Lindsay again returns to the subject of asylum provision for the poorer middle classes. He seems to favour middle class asylums rather than the admission of such cases to county asylums. This is of minor importance, accommodation somewhere is wanted, and we wish Dr. Lindsay all success in his efforts to interest his visitors and others in this most important subject.

Devon.—Beer has been given up as an article of ordinary diet, with satisfactory results.

Four charts have been prepared by Dr. Saunders, and they indicate by the graphic method various subjects of interest. By appealing to the eye they certainly show more readily the rise and fall in numbers than does the old method of figures. No. 1 shows the number of patients in the asylum at the end of each year from the opening. No. 2 shows the percentage of deaths on the average number resident. No. 3 gives the percentage of recoveries on the admissions from 1847 to 1882. No. 4 shows the weekly cost of maintenance.

Little success appears to have attended the efforts made by the Visitors to get rid of chronic and harmless cases, and thus to make room for the recent and curable. The asylum is full, and the question of providing further accommodation is under consideration.

Among the admissions there were no fewer than seven who were found "not insane."

Dundee.—It is to be regretted that the Directors find themselves in serious financial difficulties. This is the more unfortunate as, during

the year, all the patients were transferred from the old to the new asylum. In proposing to raise the rate of board as the only means of escaping their present difficulties, the Directors give a short account of the weekly charges, going back so far as 1820.

As might be expected, Dr. Rorie has much to say anent the change of residence, the new buildings, and so forth. All his remarks are in praise of the change, though he has to report the occurrence of a few rather severe cases of erysipelas, and an outbreak of diarrhœa.

Edinburgh (*Royal*).—There are many paragraphs in this report which we would reproduce did space permit, for they contain valuable truths clearly and forcibly expressed. It is an essay on some points of insanity and its treatment, for lay readers. As such, it is an admirable production, and sure to excite the interest of the intelligent portion of the public. Were it not that no Board of a Scotch or English county asylum would care to print such a lengthy paper, we would recommend Dr. Clouston's report as one of the best we have ever seen, and one well worthy of imitation. There are a go and vigour about it which are usually conspicuous by their absence in the average asylum report.

Concerning the causation of insanity, Dr. Clouston writes:—"Turning to the physical and bodily causes of the disease, the usual enormous predominance of these is found. Drink alone upset 44 cases; accidents or injuries, 15; child-bearing, 16; the periods of puberty, the climacteric, and old age, 39; and various bodily diseases and disorders, 68. But we must always remember that there are some brains so unfortunately constituted that very slight causes indeed, from within or from without, will upset them. Such brains are from the beginning so formed that they are bound to lose their balance some time in life. If one thing does not produce this effect on them another will. And between such unstable organs and the tough brains in which no cause whatever, no matter how disturbing, will upset the reasoning and controlling power, there are every variety. There can be no doubt that, as at present constituted, there are only a small minority of the human race who can be made insane in the ordinary sense. By starvation, or poison, or fever, they can be made temporarily delirious, and their mental functions may be destroyed by organic brain disease, but true insanity cannot be produced in them by any cause known to us. Some sort of direct or indirect predisposition or peculiarity of brain constitution, is needed for this. One of the great problems—as yet unsolved—for medical men is how this predisposition to insanity can be avoided, and, when present, how it can be got rid of. The preventive aspect of medicine in all its departments is perhaps the most hopeful of good to humanity. Beyond laying down general maxims as to living according to the laws of Nature—cultivating bone, muscle, and fat and letting brain lie fallow, making the educational process one of true natural development on physiological lines, going back to Nature, in fact, in all directions—we are as yet un-

able to do very much in preventing the development of insanity with scientific certainty. There is not the least use denying, however, that this liability is one of the penalties of a high brain development, especially if this is continued for several generations. There are few families who have produced more than their share of very extraordinary men or women that have not also produced more than their share of insane members. This seems to be one of the penalties of greatness. It is not the fools alone who become insane. But neither a sound physiology nor a scientific sociology can accept such a fact as a necessary part of Nature's laws. Both the one and the other must necessarily conclude that the fact is a demonstration that Nature's laws have been broken in some way in the lines of the ancestry of those families, and one of the aims of both will be in the future to find out how the bad result has come about, as well as the good. No doubt we shall in time solve the problem for humanity, how to combine the greatest mental strength with the greatest speed."

As is well known, Dr. Clouston is a great advocate of fattening up as a method of cure, in melancholia especially. It is possible that he may overdo it, but his results encourage him to continue. He says—"The great importance of proper diet and abundant exercise in the fresh air in certain cases, to which I last year alluded, has been more and more impressed on me this year of my experience. It is very surprising the effect of putting some nervous patients on a diet containing what would have seemed to me formerly an excess of milk and eggs. The gain in weight that is possible, when a previously thin and highly nervous patient is put on about a dozen eggs a-day and six or seven pints of milk, with plenty of walking exercise in the fresh air, is most surprising ; a gain of two or three stone is quite common, and usually there is an immense advance along with this in nervous stability, in contentment and in self-control, even if a complete recovery does not take place. I think such good results even make up for the increased cost, and compensate for the £56 worth of eggs which, in one quarter of this year alone, we got through, as compared with the same quarter of a year before, and which naturally surprised our Finance Committee when they came across it. I admit that at present one has to apply dietetic rules in a somewhat haphazard way ; we cannot as yet tell the exact cases in which certain diets are good and curative. But this can only be ascertained by experiment ; and I don't suppose anyone will object to such 'experiments on living beings' on any ground but the cost."

Glasgow District.—This is a new asylum under the charge of Dr. A. Campbell Clark. The report is satisfactory in every respect but one, that exception being in regard to post-mortem examinations. In an entry by one of the Commissioners the following occurs :—"Of only two of the seven patients who died was a post-mortem examination made. This is probably due to a resolution of the Asylum Committee, that no such examination of the body of any patient shall be

made without the written consent of the nearest known relative of the deceased, and the written authority of the Committee or Convener. It is clearly right that the consent of relatives should always be obtained, but it seems impossible that the authority of the Committee could be obtained, and it is difficult to see how the Committee or Convener could possess any knowledge which would qualify them or him either to authorise or forbid such an examination. It seems only reasonable that such a matter should be left to the discretion of the Medical Superintendent, who is in a better position to judge of what it is desirable to do in the circumstances than any other person can be. In suggesting that the Committee should reconsider this resolution, it is perhaps right to point out that post-mortem examinations do more than advance our knowledge of the nature and causes of insanity. If they did nothing else this would surely be a sufficient reason for making them, but they frequently lead to the discovery of injuries which patients have sustained, and the inquiries following such discoveries often prove practically beneficial to the patients."

In answer to these remarks, the Committee published the following minute :—"The Committee further, on the motion of the Chairman, agree to record that they do not consider it necessary to recall their resolution as to post-mortem examinations. It was passed after full inquiry, attention having been directed to the matter by the Commissioner reporting, in September, 1881, that the number of deaths had been large, and that 'in the case of every patient who died a post-mortem examination was made.' The Lunacy Acts provide for the care and treatment of lunatics, and for the establishment and maintenance of the necessary buildings. On the death of a lunatic the Medical Superintendent closes his professional duty by making an entry of the death in the register, and sending a copy of such entry to the person or parish interested. The Committee have no power to 'authorise' or to 'forbid' properly authorised post-mortem examinations, but it appears to be their duty to guard against such irregularities as have occurred in other places, and to know that in every case of death, the body of the patient will be dealt with in a becoming manner and according to the ordinary usages of society."

The folly of such a minute is so palpable that no comment is necessary.

Glasgow (Gartnavel).—In such an asylum as Dr. Yellowlees has under his care, where there is a large number of private patients, it must always be a difficulty to secure the services of properly qualified attendants. We, therefore, sympathise with him when he writes :—"There is always difficulty in getting exactly the right persons for attendants. Their duties are very trying and difficult, and to discharge them well requires high qualities of head and heart. The power of influencing others against their wish,

and without the familiar argument of favours bestowed or expected, is, in truth, a rare gift, but it is the true test of a good attendant. This power may be gained in some degree though experience, but never thoroughly; it is a gift, not an acquirement; a true attendant, not less than a poet, is born, not made. Many excellent servants never acquire this faculty at all; while they do their own specified duty admirably, they are useless in getting others to do theirs, and are therefore unsuited for asylum work."

The asylum is evidently in a highly satisfactory condition.

Gloucester.—The perusal of this report makes it evident that the new Medical Superintendent, Mr. Craddock, has many difficulties to encounter in his work, and we will content ourselves by wishing him every success, and that peace of mind which comes of honest work.

Hereford.—A laundry block has been completed at a cost of £1,248. No patient who can walk is now confined to the airing courts. Dr. Chapman is to be congratulated on the death rate, which was unusually low—4·98 per cent. on the average number resident. Only three women died, and for more than eight months there was no death on the female side. Such an occurrence is, unfortunately, very rare.

(*To be continued.*)

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2. *American Retrospect.*

By D. Hack Tuke, M.D.

American Journal of Insanity, July and October, 1883.

The numerous journals devoted to Psychological Medicine in the United States defy the attempt to retrospect them with any approach to regularity or completeness, regard being had to the corresponding literature emanating from the European Continent. It is not possible then, with the space at our command, to do more than touch in the briefest manner upon the articles which appear, although many deserve discussion and citation to a large extent.

Dr. Callender contributes to the July number of the above Journal an interesting record of the Association of Medical Superintendents of American Asylums in the form of a Presidential Address. It is a history of forty years, the same period which the writer of the Retrospect had occasion to review on a similar occasion at the annual meeting of our own Association in 1881.

We find that it originated in a conference, in the year 1844, between Dr. Samuel B. Woodward, of Worcester (Mass.), and Dr. Francis T. Stribling, of Staunton (Virginia), both Superintendents

of Asylums. Our Association originated, it will be remembered, in 1841, in a circular letter addressed to all concerned, signed by Dr. Hitch, of the Gloucester Asylum.

The consultation between the two American doctors was communicated to Dr. Kirkbride and Dr. William M. Awl, of Columbus (Ohio), and through their zealous co-operation, a meeting of Superintendents was held at Philadelphia, October 16th, 1844. Of these, three survived when Dr. Callender delivered his address ; now we regret to add there are only two, consequent upon the recent death of Dr. Kirkbride. The survivors are Dr. Pliny Earle and Dr. John S. Butler. A deserved tribute is paid to those who were more especially distinguished, namely, Dr. Luther V. Bell (Mass.), Dr. Amariah Brigham (New York), and Dr. Ray, whose name is justly venerated on both sides of the Atlantic by those devoted to the department of medicine he so much adorned. Dr. Bell was for twenty years the Superintendent of the McLean Asylum ; a brilliant man in various lines of thought and work, as well as in his special sphere. To him we owe the first and best description of mania with extreme exhaustion and delirium, often called after him, "Bell's disease." Dr. Brigham founded the American Journal of Insanity, and was the first Superintendent of the New York State Lunatic Asylum at Utica. Of Dr. Ray, appointed Superintendent of the Maine Hospital for the Insane in 1841, it is unnecessary to say more in this place. Passing reference is made to the names of Galt, Awl, Fonerden, Benedict, Booth, Cutler, Waddell, Landor, Chipley, Green, Tyler, Ranney, and Walker, among those, who, having passed away, deserve honourable mention. Although not a member of the Association, the well-known name of Miss Dix is very warmly alluded to, one who has consecrated a life to the welfare of the insane, and has been the means of establishing a number of excellent institutions for their care and treatment. Of the subjects discussed at the early meetings of the Association, Dr. Callender remarks that in their scope they leave little if anything to be added after the lapse of forty years, "in which science in all departments, and all forms of skill and appliance, have made unexampled progress." This observation is open to possible misconstruction, for although all that is intended, is, we presume, that the object in view, and the humane feeling and good sense brought to bear upon it, were the same then as now, and have never been exceeded in earnestness of purpose (which is quite true), it will very likely be interpreted to mean that these early pioneers saw adequately the true scientific bearings of medical psychology. That they took a broad view, however, of the direct and collateral questions to be discussed under this head, is shown by the subjects enumerated by Dr. Callender as having claimed attention and elicited reports.

The relations of the Association to Canada possess an interest for us, and we find that at the second meeting held at Washington, in 1846, the Dominion was represented by a delegate named Dr. Walter

Telfer, Superintendent of the Toronto Asylum. We are told that from that time the specialty in our Colonies in Canada "has been thoroughly incorporated in the work of the Association. Its long line of representatives, some of whom have retired from active duty, and others who have passed from the scene of life, are remembered for the zeal, ability and erudition they displayed in the debates of the body, and those now in service are always greeted warmly and cherished for similar qualities. Eminent among these, the venerable Joseph Workman, of Toronto, stands yet among us by long service, large learning and wise counsel, one of the members of the body at whose meetings he is frequently present. Thrice in its history the Association has held its sittings in the capitals of the Canadian provinces, and had the privilege of inspecting some of their admirable institutions and enjoying intercourse with that refined and hospitable people."

The tone of much of this address is apologetic, and is intended as a reply to criticisms which have been freely launched of late against the elder generation of American Alienists and the proceedings of the Association. It is to be hoped, and judging from parallel events in the course of other movements, we should say it is to be expected that critical reformers, however unfair and injudicious they may be in their philippics, will ultimately be of service, precisely as in the English Parliament, an Opposition however carping and hypercritical it may be— and injurious as it may to that extent prove—is regarded as, on the whole, a necessary and by no means unmitigated evil. But, at the same time, it surely becomes a younger generation of men, while infusing new blood into the scientific study of insanity and the treatment of the insane, to tread lightly on the shortcomings and faults of their predecessors, and to avoid placing themselves in violent antagonism to them. We are not quite sure that the Rabbi was right, who, in commenting upon the passage, "Your young men shall see visions, and your old men shall dream dreams," inferred that the former are admitted nearer to the Divinity than the latter, because vision is a clearer revelation than a dream. If, as Bacon says, men of age object too much, consult too long, adventure too little, and young men in the conduct and management of actions embrace more than they can hold, and fly to the end without consideration of the means and degrees, it is equally certain that the compound of the two is good, because the virtues of either may correct the defects of both.*

The October number contains the report of a case of Moral Insanity, by Dr. W. B. Goldsmith, the Superintendent of the Danvers Lunatic Hospital (Mass.). The patient was a girl of 18, whose father laboured under melancholia, and committed suicide. She was a healthy child

* It appears that while there were only 20 asylums in the American States and Canada in 1844, there are now in the United States and Canada 130 (accommodating 41,000 patients), and the 13 members of the original Association are now represented by 115.

until seven, when she had scarlet fever, severely attended with convulsions and delirium, which continued several weeks. From the time of this illness a mental change was observed. She could no longer be made to obey, and was easily excited. About this time her father's suicide occurred, and on seeing the corpse, she became hysterical and lost her self-control. Shortly after she went to school, but she was sent back as she caused so much trouble: "There must be a screw loose somewhere" said her teacher. At home she displayed violent paroxysms of temper and violence. She told lies and erotic feeling was early developed. Medical advice was obtained then and subsequently, with the result that she was sent to an asylum from the age of 9 to 13. Dr. Godding, who was then the Superintendent, failed to detect any intellectual defect, and regarded her case as one of true moral insanity. Her morbid peculiarities developed as she grew older, and she was next placed in the Worcester Asylum for twenty months, under Dr. Quimby, who deemed it best to treat her as a wilful child, and whipped her with the mother's consent. The effect at first was excellent, but on repetition it lost its effect. Still self-control somewhat increased. Dr. Quimby, "after repeated and careful examination, was unable to discover any intellectual impairment." She was, on the contrary, "especially bright." She keenly distinguished right from wrong, and "*only* seemed lacking in the power or will to control herself." For four months she remained at home, exercising self-control admirably. Then, about a week after scanty catamenia and dysmenorrhœa, she began to complain of her head, and was nervous. A few days after, in consequence of chagrin, she jumped from the roof of the verandah, and was found on the walk below screaming and maniacal, a mental condition which continued in an intense form for two days. She was removed in consequence to the Danvers Asylum (Oct. 14, 1880), where she has remained, and "engaged the sympathy and exhausted the resources of treatment, mental and moral, of everyone who has come in contact with her." The attacks not unfrequently occur during menstruation; she complains of dull pains in the iliac regions, especially the right, and also of headache. She is at first distressed and apprehensive, then violent, and screams till she is hoarse. Mostly the attacks are excited by moral causes, as disappointment, or she apparently desires by her conduct to attract attention and sympathy. She rarely uses bad language, or is obscene, but a tendency to eroticism manifests itself. With the exception of ovarian tenderness, nothing abnormal was discovered on examination.

Such a case may be set down as one of hysterical mania, but with this peculiarity, that although mentally affected before nine years of age, and almost always requiring asylum care, "there is an unusual symmetry and completeness in the development of her intellectual faculties, and her mental capacity is markedly above the average. She never has shown a semblance of a delusion or hallucination, has

no peculiarities in her likes, dislikes, habits of life or tastes; when calm, is generous and affectionate to her attendants. . . . She is capable of giving judicious advice to them concerning their hospital duties or private affairs, and is much relied on by them. She reads a great deal, mostly light literature, and excels in neatness and despatch in accomplishing all kinds of work with which her life has allowed her to become familiar." Curiously enough, she admits her responsibility at the beginning of the attack, but says she cannot control herself when once started. Dr. Callender administered bromides, hyoscyamine, chloral, &c., without benefit. A padded-room appeared to be the best palliation. Various forms of mechanical restraint were applied and demolished. In short, force proved to be no remedy. Finally, in despair, and as a last resort, the ovaries were removed (August 12, 1883), the patient recovering well from the operation. Here the case ends for the present, and we look with interest to a future report. The apparent connection of the attacks with ovarian excitement certainly justified the experiment. The change of character, however, consequent upon scarlet fever, and the unfortunate heredity, present a complication anything but favourable in considering the prognosis.

The Journal of Nervous and Mental Disease, October, 1883.

The first article in this Journal is an important one by Dr. G. L. Walton, of Boston, on the "Neglect of Ear-symptoms in the Diagnosis of Diseases of the Nervous Symptoms." Dr. Walton has enjoyed excellent opportunities for observation of nervous affections in the hospitals of Paris, Berlin, &c., and has availed himself of them in a way calculated to advance our knowledge of diagnosis by concentrating his attention on special points of interest rather than by diffusing it over many. It is, indeed, a remarkable fact that aural symptoms are almost entirely passed over by neurologists and psychologists. From time to time, however, our attention is forcibly directed to the close relation existing between ear and cerebro-mental disorders by the rapid recovery of insane patients after the removal of obstructions in the meatus. Auditory hallucinations, again, not unfrequently stand in important relation to deafness, and, on the other hand, patients will sometimes describe their sense of hearing as preternaturally acute. Fürstner has reported cases in which auditory hallucinations, apparently due to anæmia, induced mental depression. Dr. Walton has done well, then, to study otology in connection with neurology, and to place his researches on record. As hysterical blindness has been rescued by Charcot from vague generalities, so hysterical deafness has been found to be no less marked by regular characters and definite laws. Thus, for example, audition through the bone disappears in hysterical and senile deafness before that through the meatus, and high tones are lost before middle tones. Dr. Walton has found such knowledge useful in diagnosing functional anæsthesia.

It is usual to explain loss of hearing in advancing life by impaired bone-conduction, but as the like defect occurs in young women, the explanation has to be sought, in both instances, in the fact that the auditory centres themselves are less tenacious of high tones and of sounds passing through bone. Other examples of the importance of studying ear-symptoms are seen in lesions of the pons, medulla-oblongata, and cerebellum, as also in Menière's disease and locomotor ataxy. We cannot doubt that in future much more accurate observations will be made upon the auditory sense in nervous and in mental affections; in short, that "reports of cerebral disease ignoring the condition of the hearing and the examination of the ears will be considered as incomplete as they are at present without record of the condition of the eyes."

A discriminative tribute to the memory of Dr. Wilbur is written in a kindly tone by "W. W. G.," who thus expresses himself:—

We felt that his criticisms of our methods were certainly not generous, hardly just; but the trouble was, there was too much truth in them. It was good, wholesome truth for us to hear, at any rate, for the Association of Medical Superintendents of Institutions for the Insane had become too much of a mental admiration society for healthy growth. More than thirty years ago he had been introduced to the Association by one of its founders and welcomed by it, had amicably co-operated with us for many years, attending most of our meetings; and then becoming exclusive, we unwisely and rudely, it seems to me, drove the superintendent of idiot asylums out of our synagogue Was it to be expected that he would be very indulgent to our methods after that? . . . Perhaps, after all, we were a little too sensitive of comparison with the English, fearing that our methods might not be properly appreciated, by any outsider, and so too easily we took offence where only fair criticism was meant. I at least am convinced by my correspondence with him that his convictions were honestly held, and much as I may regret that he could not see some things differently, now that I can no longer join issues with him—standing uncovered in the presence of that silence which has fallen over all our strivings—I feel it is due to him to say that he was more sinned against than sinning.

Death has a wonderful influence in softening the bitter feelings and rivalries arising during life between fellow-workers in the same field.

The American Journal of Neurology and Psychiatry, August, 1883.

This number contains an article by Dr. Spitzka on "The Alleged Relation Between the Speech-disturbance and the Tendon-reflex in Paretic Dementia," elicited by a paper read before the American Neurological Association, by Dr. Shaw, on the tendon-reflex in general paralysis, in which he advocated a direct connection between difficulties of speech and exaggerated tendon-reflex, as also hemi-paretic attacks, such relation being demonstrable by pathology. It is hardly necessary to say that the presumption is against any such connection. Dr. Spitzka has, however, tabulated cases of general paralysis in which the speech-disturbance and the tendon-reflex were noted, and so far as eighteen cases prove anything, they prove that clinical observation does not bear out Dr. Shaw's conclusions. Thus out of eight instances in which the knee-jerk was exaggerated, the speech

was markedly affected in only one instance, whereas, in two instances in which the reflex was abolished, the speech was much affected. It is a pity that similarly careful observations are not instituted in all cases in which statements of this description are made.

The simulation of insanity by lunatics is a very important practical subject, and to its elucidation Dr. Bluthardt contributes an article. He cites a considerable number of examples, and reports a striking case.

An elaborate article by Dr. Hoffmann, on the normal and pathological anatomy of the grey substance of the brain does not admit of condensation. Fifty pages would seem rather a disproportionate allowance for one paper in a single number.

The consulting physician to the Inebriate Asylum, Fort Hamilton (L.I.), Dr. Mason, contributes an article on Alcoholic Insanity. He makes the usual division into acute and chronic; the sub-divisions of the form being:—(1) Acute alcoholic mania (mania a potu). (2) Acute alcoholic delirium (delirium tremens). (3) Alcoholic epileptiform mania; and the sub-divisions of the latter being:—(1) Chronic alcoholic mania—maniacal type—homicidal tendencies. (2) Chronic alcholic melancholia—suicidal tendencies. (3) Alcoholic dementia. (4) Dipsomania or oinomania.

In the first form, the paroxysm occurs in the midst of a debauch, and is not common in the habitual drunkard. It usually lasts only a few hours, but if febrile action is set up, may last for some days. An alcoholic maniac may commit any crime in the calendar. Unlike other forms, it is not preceded by delusions. Imbeciles and epileptics, as everyone knows, become fearfully dangerous.

Acute alcoholic delirium (D.T.), is divided by Dr. Mason (who criticizes the reference to tremor in the popular term) into three forms, the simple, non-febrile one, in which convalescence quickly follows; the second, in which recovery is slow, the delusions persistent and the relapses common; while in the third, "Febrile delirium tremens," the pulse and temperature are high, and death frequently occurs in a few days. A good analysis is given of the symptoms in acute alcoholic insanity, including the pantomimic state in which a tailor for instance will thread an imaginary needle, and stitch an imaginary cloth, like Sir Jacob Kilmansegg washing his hands with invisible soap and imperceptible water. Two divisions suffice for the chronic form, the maniacal and homicidal, and the melancholic or suicidal. In both the suspicions and dread of persecution are prominent symptoms. Marital unfaithfulness is a particularly common delusion. Some striking cases illustrate Dr. Mason's paper, which is very clearly expressed.

Dr. Mason dwells on the points of diagnosis between chronic alcoholic mania and the acute forms, general paralysis, syphilitic insanity and traumatic insanity associated with intemperance. No difficulty is experienced in recognising the beery delirium, insomnia and restlessness of the acute form as separating it from chronic alcoholism, in which the sleep may not be disturbed, and the delusions become

fixed and monomaniacal. More difficulty is felt in cases of general paralysis in an early stage, complicated as they often are by fits of intemperance. The general rule, no doubt, holds good that there is here exaltation, but the diagnosis may be wrong when depression and hypochondriasis exceptionally take its place. Further, alcoholic insanity may merge into true general paralysis, and there may be a stage during which no physician can speak positively as to the nature and future course of the affection; at any rate, if he does diagnose in haste, he is as likely as not to repent at leisure. No doubt, as pointed out, grandiose ideas are more logical and plausible in the alcoholic than in the paretic patient.

Regarding syphilitic and traumatic insanity, Dr. Mason refers to reports of cases of alcoholism, in which the history was obtained, and it was found that one case in four had syphilis, and one case in six had received injury to the head. To determine the real cause of the attack, it is absolutely necessary to examine minutely into the history of the case, so as to avoid confounding causation and a mere symptom.

Dipsomania is defined as an irresistible impulse, "driving a person to get drunk at stated or irregular periods preceded by melancholia, insomnia and restlessness, the debauch itself causing hallucinations, tremors and gastric derangement. Dr. Mason does not dwell further upon oinomania, but passes on to the symptoms of chronic alcoholism or the effects of chronic poisoning by alcohol, which may co-exist with any type of alcoholic insanity. We need not, however, refer to these well-known symptoms.

On prognosis, Dr. Mason does not speak more hopefully as to a radical cure than we should expect. It is the old story of frequent recovery from the particular attack for which he comes under care, and no end of relapses. The treatment recommended by the writer, inebriates must be glad to learn, does not necessarily exclude alcoholic drinks. "The method of treatment will include the use of alcoholic stimulants. Whether or not these shall be used, will depend much on each individual case; some may be very much benefited by the use of stimulants, and others positively harmed [an apparently unexpected result!] As a rule, I have found that when stimulants are indicated, the malt liquors are preferable to spirituous liquor—Bass's ale, Guinness's stout, or lager-beer when a milder form is required. The quantity as well as the form of the stimulant used, and whether or not it is to be used, each case must determine for itself." This might mean that each patient is at liberty to decide the quantity as well as the form of alcohol consumed, but even taking the alternative and narrower meaning of the paragraph, we must say that Dr. Mason would be a very charming physician to be under, and that the Inebriate Asylum at Fort Hamilton, must in the eyes of a dipsomaniac, be robbed of the terrors with which he might not unnaturally have regarded it before admission. We should rather like to know whether the Doctor's generous board is at all exceptional in the American inebriate asylums, and if it is, and answers well, whether

the Dalrymple House, whose opening we recorded last quarter, ought not to follow suit. Dr. Norman Kerr, however, might have something to say on this matter, and suggest unpleasant doubts about the danger of keeping up the drink craving, and might possibly prognosticate that asylums for inebriates would, under such circumstances become but too truly inebriate asylums—especially as Dr. Mason observes, when speaking of patients who have *left* the asylums, that, "even that which might in a healthy person be regarded as a moderate use of alcohol, will undoubtedly bring on a relapse."

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3. *Colonial Retrospect.*

BY FREDERICK NEEDHAM, M.D.

Annual Report of the Inspector General of the Insane. New South Wales. 1882.

In Dr. Manning's interesting report we are presented with another year's record of the operations of the Lunacy Department, over which he presides with so much energy and ability.

It appears that the burden of insanity which has so heavy an incidence in this country, presses with little less severity upon one of the largest and most important of its colonial dependencies.

The number of insane persons in the various asylums, and otherwise on the registers, on December 31st, 1882, was 2,307 as compared with 2,218 at the same date in 1881, giving a percentage of 2·82 per thousand of population, or 1 in every 354, as against 1 in every 353 in England.

The gradual rate of increase in the proportion of insane to population in New South Wales and this country respectively is shown in the following table :—

Year.	Population of New South Wales.	Total Number of Insane in New South Wales on 31 December.	Proportion of Insane to Population in New South Wales.	Proportion of Insane to Population in England.
			Per M.	Per M.
1873	560,275	1,526	1 in 367 or 2·72	1 in 381 or 2·62
1874	584,278	1,588	1 in 367 or 2·72	1 in 375 or 2·66
1875	606,652	1,697	1 in 357 or 2·80	1 in 373 or 2·68
1876	629,776	1,740	1 in 361 or 2·77	1 in 368 or 2·71
1877	662,212	1,829	1 in 362 or 2·76	1 in 363 or 2·75
1878	693,745	1,916	1 in 362 or 2·76	1 in 360 or 2·77
1879	734,282	2,011	1 in 365 or 2·74	1 in 357 or 2·80
1880	770,524	2,099	1 in 367 or 2·72	1 in 353 or 2·83
1881	781,265	2,218	1 in 352 or 2·84	1 in 352 or 2·84
1882	817,468	2,307	1 in 354 or 2·82	1 in 353 or 2·83

The general movements of cases and the results of treatment in the Colony are set forth in the following table which gives the admissions, re-admissions, discharges and deaths, with the mean annual mortality and the proportion of recoveries, &c., per cent. in the

hospitals for the insane, for the years 1876 to 1882 inclusive, and including the licensed house from the year 1882.

Year.	Admitted. Admitted for the first time.			Admitted. Re-admitted			Transferred from other Hospitals, &c.			Discharged. Recovered.			Discharged. Relieved.			Transferred to other Hospitals, &c.			Escaped and not recaptured within 28 days			Died.			Remaining in Hospital, 31st December in each year.			Average number resident.			Percentage of Recoveries on Admissions and Re-admissions.			Percentage of Patients relieved on Admissions and Re-admissions.			Percentage of Deaths on average numbers resident.		
	M.	F.	Total.	M	F	Total.	M.	F.	Total.	M.	F.	Total.	M	F.	Total.	M.	F.	Total.	M	F.	Total.	M	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1876	182	111	293	33	27	60	101	12	113	88	70	158	17	19	36	100	45	145	—	—	—	78	29	107	1072	533	1605	1052	536	1588	40·90	50·72	44·75	7·90	13·76	10·19	7·41	5·41	6·73
1877	262	100	362	62	24	86	133	14	147	137	64	201	17	18	35	130	21	151	—	—	—	97	20	117	1147	548	1695	1130	529	1659	42·28	51·61	44·86	4·97	14·51	7·81	8·58	3·78	7·05
1878	212	126	338	40	38	78	112	36	148	108	46	154	17	20	37	113	45	158	—	—	—	99	28	127	1174	609	1783	1175	579	1754	42·85	28·05	37·01	6·75	12·19	8·89	8·42	4·83	7·24
1879	241	128	369	40	26	66	98	12	110	112	58	170	21	28	49	97	17	114	—	—	—	91	26	117	1232	646	1878	1188	620	1808	39·86	37·66	39·08	7·47	18·18	11·26	7·66	4·19	7·10
1880	267	145	412	28	30	58	42	24	66	133	63	196	21	19	40	40	35	75	3	—	3	96	40	136	1276	688	1964	1249	665	1914	45·08	36·00	41·70	7·11	10·85	8·51	7·68	6·01	7·10
1881	284	134	418	35	27	62	31	9	40	133	73	206	16	14	30	34	19	53	5	—	5	84	26	110	1354	726	2080	1314	700	2014	41·69	45·34	42·91	5·01	8·69	6·25	6·39	3·71	5·46
1882	286	142	428	20	25	45	38	14	52	118	84	202	22	16	38	38	14	52	3	—	3	93	48	141	1430	877	2307	1392	854	2246	38·56	50·29	42·70	7·18	9·58	8·03	6·68	5·62	6·27

The percentages of recoveries to admissions, and of deaths to the average numbers resident, were for the seven years which ended in 1882, 42 and 6·7 respectively. From the table which gives the apparent or assigned causes of insanity in the admissions during the year under review, it appears that intemperance in drink was credited with the causation of the mental attacks in 67 of the 473 admissions, while hereditary predisposition was ascertained in 37 instances only; this being probably due to the fact that of the 2,743 patients under care in 1882 only 711 were natives of New South Wales—the previous history of the remainder being presumably unascertainable.

Dr. Manning is able, with reference to his own sphere of work, to confirm the opinion of the English Commissioners as to this country—that the proportion of persons attacked with insanity is at present not on the increase.

The recent publication of the census returns has enabled him to give a series of interesting tables with reference to the nationality and ages of the insane in the Colony under care in 1881.

It is not necessary to give the tables themselves here, but the conclusions which he has drawn from them are both curious and interesting. He says "The proportion of insane men under care in 1881 to every 1,000 of population was 3·98, whilst the proportion of insane women was only 2·95, whereas in England the proportion of insane men was during the year 1881 2·38, and of women 2·52 to the population. The difference may be accounted for partly by the fact that for many years the proportion of males in this Colony was largely in excess of the females, and during all these years contributed a large annual quota to the number of insane now accumulated as chronic cases in the asylum, and partly from the stress of climate and of occupation falling more heavily on the male than on the female population. The drinking habits of a large part of the male population may also account in part for the difference. The proportion of insane to population born in New South Wales is only 1·40, and in other Australian Colonies 1·23 per 1,000, whilst the proportion born in Great Britain is 7·97 per 1,000, and in foreign countries 8·69 per 1,000 of the population. It appears that the number of insane born in England and Wales is 6·36 per 1,000 of population; in Scotland, 6·18 per 1,000; in Ireland, 11·63 per 1,000; in France, 12·06; in Germany, 8·37; in China, 6·46; and in other countries, 10·40.

"The very small percentage of Australian-born population is to be accounted for by the fact that insanity is a disease most common in middle and old age, and is rare in childhood and youth, to which period of life one-third of the population mainly, if not entirely, of Australian birth belong. The high proportion of foreign-born patients appears due partly to the admission of the waifs and strays of all nations to our hospitals, the ports of other Australian Colonies being to a large extent closed to them, and partly to the peculiar isolation of foreigners in an English-speaking community, an isola-

tion which tends to mental disturbance. The very large proportion of persons born in Ireland, which is twice as large as the proportion born in England and Scotland, is perhaps the most remarkable fact shown by these returns. The total number of insane persons of Irish birth under care in 1881 was 804, or nearly one-third of the total number, whilst the proportion of persons of Irish birth to the general population was only about one-eleventh."

The existence in New South Wales of an institution for the insane of a peculiar, and almost an unique kind, is recorded in the following suggestive remarks:—

Reception House for the Insane, Darlinghurst.

The Lunacy Act Amendment Act, which was assented to in December, 1881, opened the doors of this Institution to the many doubtful cases of insanity which are taken before the Police Magistrates sitting in Sydney, and remanded for medical treatment and further inquiry, and the patients now admitted to this Institution are of two classes—

1st. Those for whom either one or two medical certificates have been signed, and who are awaiting transfer to a Hospital for the Insane, and

2nd. Those who are under remand under section 1 of the Amending Lunacy Act.

Of the first class, three patients remained on 31st December, 1881, and 310 were admitted during the year; making a total of 313 under care and treatment. Of these, 24 recovered and were discharged; 285 were sent on to hospital, and one died and three remained on 31st December, 1882. Of the patients forwarded to hospital, 246 went to Gladesville, 37 to Callan Park, and one to Newcastle.

Of the second class, 227 were admitted, and of these 153 were found, after treatment varying from seven to twenty-eight days in duration, fit to be at large; 61 were certified as insane, and returned to the Reception House for transfer to hospital; four died, and nine remained at the close of the year.

Taking the two classes together, and deducting the 61 patients who appear in both classes, first under remand and second under certificate, the number of cases treated has been 479, and of these 177 were discharged recovered.

The work done by the Institution has therefore been large and important. It enables scientific treatment to be applied under favourable conditions at an early stage of the malady, and so stops a number of cases from passing into a more advanced stage, and affords a temporary refuge of the most fitting kind for cases which from their nature must go on to hospital for further and more lengthened treatment.

At present this Institution is all but unique; the only similar Institution of which I am aware being at Paris, near the large Asylum of St. Anne, and receiving all the cases from the Department of the Seine. In England the wards of the poor-houses have, up to this time, done part of the work carried out here by this Institution, but the want of a separate Institution is much felt, and Sir H. W. Gordon, a Justice of the Peace for the County of Middlesex and Visiting Magistrate for one of the largest County Asylums, in a letter published in the *Lancet* of the 21st October, 1882, recommends the establishment of a Receiving House for the County, and urges that all lunatics should first be sent to this Institution and detained there under supervision until each individual case has developed itself, when the patient would be either discharged or drafted to such Asylum as the Medical Officer might consider best suited for the particular case; and the "Lancet," in commenting on this letter, points out that this is identical with a proposal made by the "Lancet" Commission on Lunatic Asylums, in 1876-7, as "likely to effect a solution of the difficulty of dealing with doubtful cases."

This Colony is in this particular very decidedly in advance of the Mother Country, and the establishment at Darlinghurst, as well as the work done in it, may be viewed with satisfaction. I have had particular pleasure, both during the past and former years, in showing the Institution to visitors from other Colonies interested in the treatment of insanity.

Dr. Manning gives at length the entries which he has made on the occasions of his frequent visits to the several Asylums which he inspects. And it is obvious that, although there are some overcrowding and other defects resulting chiefly from the transitional state of the buildings, their general condition is satisfactory, and the treatment of the insane in the Colony creditable to those who are responsible for their care.

We are, unfortunately, unable to give so satisfactory an account of the treatment of the insane in another Colonial possession of this country, the report of whose Asylum is now before us.

The Colonial and Criminal Asylum of Trinidad, on the 31st December, 1882, contained 39 patients in excess of the accommodation.

The average number resident during the year was 292; 112 patients were admitted, 40 discharged, and 51 died!

The recoveries were at the rate of 33·9 per cent., while the deaths amounted to 17·4 per cent. on the average numbers resident, the death-rate of the last 10 years having averaged 15 per cent.

That Mr. Seccombe, the Medical Superintendent, who was formerly at Caterham, fully realizes the defects of the asylum of which he has recently assumed the control, is obvious from the *resumé* of

them which he places before the Colonial Secretary in the following indictment :—

"I take this opportunity whilst making my first report to draw His Excellency's attention to the points in which this Asylum from various causes fails in its object, namely, the care and cure of the Insane.

"The site, unhappily chosen on the side of a steep hill, comprises some six acres, and on this confined space are dotted about various blocks which immediately suggest to one's mind the difficulties that must attend the administration of the Asylum. Of course this irregular arrangement of the blocks is, in a measure, due to the attempts which have been made at various times to meet the ever-increasing demand for extra accommodation.

"Nearly all the blocks, which have both internally and externally a prison-like appearance, are unsecure, many positively rotten, offering to the patients facilities for their escape, and in addition the blocks, from their faulty construction, afford the inmates ready means for their self-destruction. This I need not remark is undesirable; communication from one block to another is carried on in some cases over steep, dangerous declivities, rendered more difficult and dangerous during the rainy season.

"The two sexes are not sufficiently kept apart. Some of the Male patients sleep in a block on the Female portion of the Asylum, and six of the Male Attendants have accommodation provided on the same section of the Institution. I need not enlarge on the unpleasant results which might follow these faulty arrangements.

"The Water Supply, which is never abundant, seldom sufficient, is often so scanty that for days we have not enough water in the Asylum for cooking purposes. This necessitates water being carried from a ravine on the mountain side, distant over half-a-mile from the Asylum. When this dearth of water exists, the daily bathing of the patients, which is so necessary in this climate, is prevented, and the work in the Laundry is at a standstill. I may add the same baths and the same water are used for bathing and laundry purposes. The source of our Water Supply is situated on the lowest point in the Asylum premises, the Cook and Bakehouses on one of the highest. It is unnecessary to detail the extra labour, &c., thus resulting.

"The Closet accommodation is most meagre. On the Male side we have two Closets on the earth and charcoal system for the use of 185 patients; the Females are equally unprovided for. This I would simply note as among the very many difficulties with which one has to contend in administering the Asylum.

"On the Male side there is Day-room accommodation for about two-thirds of the patients, on the Female side we have no Day-room. The meals are served to the Females in a small confined Gallery, where they while away the tedious monotony of their every-day exis-

tence in ceaseless quarrelling, the result of overcrowding; I have been speaking of able-bodied. In the Infirmaries, both Male and Female, the patients are in even a worse condition; the wards are so overcrowded as not to admit of tables being used on which to serve the food; the patients take their meals in anything but an orderly manner, and the spectacle presented is not such as one cares to witness, so different from what is seen in the well-regulated Asylums in the United Kingdom.

"This overcrowding, which has been steadily increasing during the past year, is now taxing our resources to the utmost; we have 39 patients over our number, and we ought to consider the future, as, with an increasing population, we must expect an increase of the Insane. I am sorry to report that the overcrowding is affecting the health of the patients, causing an increase of disease and death, and we must still further expect an increase of our mortality whilst the numbers exceed the accommodation.

"We have no airing Courts; in the Home Asylums every section has its own airing Court, where, under the supervision of the attendant, a patient may roam at will within its limits. With us patients are necessarily confined to a certain position, on a certain bench, to wander from which means to wander from the view of the attendants. Patients naturally resent being kept in a fixed position, and unseemly struggles between the attendants and patients frequently ensue, to the detriment of the patients.

"When I first took over the charge of this Asylum, scarcely a patient was employed beyond a few women in the Laundry, and those of both sexes told off to clean the respective blocks and carry water. This year I hope, partially, to remedy this state of affairs, by employing patients at several trades, such as Tailors, Bootmakers, Carpenters, &c.—in fact to make the Institution, as far as possible, self-supporting. It is by employment, and by employment chiefly, that we may hope to render these patients useful members of society. In this direction one's efforts are unfortunately limited, owing to the confined site on which the Asylum is erected; we have a large number of Coolies, both male and female, the majority of whom might, with advantage, be employed in the cultivation of the land, rearing stock, &c., all of which means of employment have been long recognised in the Home Asylums as potent agents in the cure of Insanity.

"We have little or no amusements for the patients, and dances, musical entertainments, &c., are almost out of the question, as we have no suitable building in which such forms of recreation could be held.

"One would have to go back forty years in the History of the Insane to find another such Asylum at Home. I would call His Excellency's serious attention to the pressing necessity for the immediate construction of a suitable Asylum on a suitable site. To further

delay means simply to increase the expenses of construction whenever it is taken in hand, as our numbers are daily increasing, and, instead of the Asylum being a Hospital for the treatment of the Insane, it is rapidly becoming a Refuge for the chronic Insane, the patients lapsing, owing to the want of means for their cure, into hopeless forms of Insanity, in which state they will be life-long sources of expense to the Colony."

It is to be hoped that Mr. Seccombe's energy will overcome the obstacles which now exist to the proper care and treatment of the insane under his charge. In this connexion it is unfortunate that the income of the Colony is at present exceeded by its expenditure, but he has our best wishes for his success.

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4. *German Retrospect.*

By William W. Ireland, M.D.

Hypertrophy and Sclerosis of the Brain in Idiots.—Dr. Oscar Brückner ("Archiv.," xii. Band, 3 Heft) has made a curious study of the symptoms and pathological appearances found in the brain of an imbecile woman who died in the asylum at Halle. She came of a family visited by phthisis, but free from any neurosis. She was weak-minded from birth, began to speak at two years of age, and to walk about four. She was sent to school at seven years of age, but it was found that she could not learn. There were no epileptic fits till the ninth year, when she experienced a very severe one. After this she had frequent spasms of one or other of the extremities, like the motions of chorea, accompanied by momentary loss of consciousness. There was also a jerking character about her ordinary movements, which had not been noticed before. Her mental powers at the same time became duller. She was more apathetic and indolent. In a few years the convulsions ceased, and the mental faculties became brighter. In September, 1876, after being teased by some children, she passed into a state of maniacal fury, which necessitated her entrance into the asylum. In a short time she passed into a state of dementia. She spoke little, would not dress herself or comb her hair, and was sometimes dirty in her habits. After a year the epileptic movements returned, and she was shifted into the poor-house as incurable, where she died of phthisis in 1880.

On examination there were found general hypertrophy of the brain and numerous hard masses of hypertrophy of the neuroglia scattered over the surface of the cortex, and also affecting the corpora striata, the optic thalami, and the cerebellum. The sclerosed matter was found to be composed of the connective tissue at the expense of the nervous elements. Very few vessels were seen traversing the sclerosed

patches. The fact that this adventitious matter was more abundant in the frontal gyri (the first and third) and the lower part of the median and neighbouring frontal convolutions seems to explain both the diminished mental power and the motor disturbances.

Dr. Brückner cites a somewhat similar case of Bourneville's. This was an idiot girl, who did not speak, and was paralysed on the right side. She had frequent convulsions, which commenced with movements of the muscles of the eyes at the age of fourteen months. At the end of the second year she had a complete epileptic attack. She died in the *status epilepticus* when fifteen years old.

On examination there were found little rounded, whitish, opaque masses of a greater density than the nervous matter of the cortex, amongst which they lay, somewhat bulging above the surface—as M. Bourneville expresses it, a sort of hypertrophic sclerosis of portions of the convolutions. The left side of the brain was more affected than the right. The gyri most infiltrated were the first and third frontal, the two median and the lobulus paracentralis on the right hemisphere. The second and third frontal and the anterior median gyrus were the most affected.

Cysticercus in the Brain ("Neurologisches Centralblatt," 15th November, 1882).—Zenker, in a treatise on this subject, has collected fifteen cases of cysticercus racemosus since the first case was described by Virchow in 1860. Five of them were noticed in the brains of patients who had died of other diseases, and seven died of the effects of the parasite, four of these quite suddenly. What the other three died of is not mentioned. Some of the cysts wanted the head. These remain sterile. The wall of the bladder is without vessels, and structureless. In five of the fifteen cases, in which the cysts were small, there were no cerebral symptoms; in eight, such symptoms were marked, though variable in character. In the more decided cases chronic arachnitis, and following upon that, chronic hydrocephalus. The duration of the disease varies much. In one case the parasite seems to have remained in the brain for seventeen years. As long as the cysticercus racemosus remains small its effects may be unnoticed, but when it increases in size it produces severe functional disturbances of the brain, sometimes complete amentia, and often sudden death.

Cysticercus has been found in the spinal cord by Walton, producing symptoms such as appear towards the close of tabes dorsalis.

Cysticercus in the Brain with Insanity.—"The Irrenfreund," Nos. 7-8, 1881, contains a description of a patient affected with this rare form of disease. Miss N., 57 years old, had a hereditary neurosis both on her father's and mother's side. She had suffered from hysterical attacks when young, and when about forty-five from mental derangement for several years from which she recovered. About two months before the second attack she was troubled with headache, sleeplessness, and startings in the limbs, which her medical attendant attributed to

hyperæmia of the brain. The appearance of melancholia with delusions of persecution and hallucinations, and an attempt at suicide led to her being put under the care of Dr. Claus in the asylum of Sachensberg.

On admission she was found to have trembling in the arms, and the right pupil was dilated. There was a moderate degree of ptosis of the right eye, and hypermetropia of both eyes. The patient saw a great variety of objects such as threads, pearls, sparks, white bodies like flakes of snow, and coloured streaks flying here and there. She often thought she saw a beam which she felt to descend and lie upon her head. She complained of weakness and giddiness, and was in a state of deep melancholy fearing for her life. The appetite and sleep were good ; the bodily functions normal. Hallucinations of hearing and of touch were soon added. She thought she heard threats and reproaches from the people around, and held her companions to be witches. She sometimes said that she tasted poison in her food. After four months she was sent out of the asylum, but soon had again to return. It was noticed that the hallucinations were stronger by lamplight, and were seen more distinctly by the right eye which was sometimes troubled with nystagmus and with the spasmodic closure of the eyelid. She described what she felt in the following manner :—

A pain began in her right eye, the eye ball moved about, then there was numbness in the head, in the fingers and in the whole body, with a distressing and indescribable feeling in the head as if she were losing her senses. At another time she felt as if she had got a blow on the right eye, or as if it would fall out, and there was tenderness at the point of exit of the supra-orbital and the supra-trochlear nerves. Coloured forms floated before the eye like balls of flame, generally of a blue colour. These appearances were sometimes not apparent to the left eye, though sometimes they were visible to it along with the right one. Towards the close of her time in the asylum a right lateral hemiopia was observed. Her intelligence remained good. She had at an early period of her illness lost the power of writing correctly ; the words came in wrong order, and she could not keep the lines straight. There was slight paralysis of the face on the right side. The startings in the muscles of the arms and legs gradually got worse, passing into clonic spasms which continued for half-an-hour at a time, so that she would stand up in bed which she found caused them to cease. At last they passed into regular epileptic fits with loss of consciousness.

About four months after her first admission there was partial paralysis of the right arm with diminution of sensibility which lasted seven weeks. Eight months after, following three epileptic fits, there was paresis of the left arm lasting several days. The epileptic fits became very frequent, and she died nearly two years after her admission. The brain was found to weigh 1,350 grammes. Scattered over

the encephalon were found as many as from three to four hundred cysts from the size of a pinhead to that of a bean. They were found to be the cysticercus cellulosus of the tænia solium with four suckers, and double set of hooklets. Some of them seemed to be undergoing a process of degeneration. These parasites covered the convexity of both hemispheres, but were most numerous on the right side. More than a hundred of them lay on the frontal, parietal and temporal lobes. On the right floor of the orbital portion of the brain there were twelve cysts ; on the left there were five. The optic nerves were free ; but one cyst lay in front of the chiasma. The cerebellum, and outer surface of the pons, medulla, and spinal cord were unaffected. Some of the cysts were found imbedded in the grey substance of the hemisphere, and even a few in the white matter. The parts around the cysts were hyperæmic, and there was some formation of nuclei observed through the microscope. There was a cyst in the anterior left corpus quadrigeminum. Apparently the brain tissue was not much affected, even in the immediate neighbourhood of the cysts. Dr. Claus observes that though there were a much larger number of cysticerci on the right side of the brain, it was not on the crossed side that the convulsions or paralysis were most marked.

Melancholia, Induced by a Sound in the Ear.—Tuczek has described ("Zeitschrift," Band xxxviii., Supplement Heft) a case observed in the clinique at Marburg in which melancholia seemed to have been induced by a peculiar sound in the ear. The patient was a lady of twenty-nine who had suffered an abortion with great loss of blood. The melancholy disappeared after the cause ceased. The noise in the ear came on suddenly. The patient compared it to the ticking of a watch or crackling of the finger nails. It was twice as frequent as the pulse and was synchronous with an undulation of the external jugular, but was not influenced by the respiration. The hearing power was not diminished, and the auditory meatus was found free from any foreign body. The tympanum was normal. The patient was unquiet and anxious and sought to attract attention to the distress in the ear. She believed that something was wrong in her head and slept badly. It being noticed that pressure of the tympanum against its posterior wall made the noise cease, the meatus was stuffed, and the sound did not come back when the padding was removed. The mental condition straightway improved, the patient became cheerful and hopeful, sleep returned and her general health became good. In six weeks she was discharged as recovered.

I once observed a case of the same kind in a man wounded in the temporal bone. The sound was like that of the beating of an artery in the ear, or like the heart's sounds applied close to the ear. It used to come on suddenly, sometimes four or five times a day, when the patient would lie on the opposite side till it went away. It caused him great distress, and he much feared its coming on ; but there was

no melancholia or symptoms of mental aberration. At last he discovered that it could be stopped at once by closing the nostrils and suddenly taking a deep breath, so as to bring a stream of air through the meatus to strike against the tympanum. In the same way, closing the nostrils and making a forcible expiration would bring it on. It thus appeared to be in some way connected with the convexity of the tympanum being directed outwards.

Census of the Insane in Prussia ("Centralblatt für Nervenheilkunde," 15 Sept., 1882).—By the census of 1880, there were found to be in Prussia 34,309 insane persons of the male sex, and 32,036 females; 66,345 in all. By the census of 1871, there were found to be 28,002 males, and 27,041 females; in all 55,043 insane. During these nine years the number of the insane had increased by 20 per cent., and the deaf and dumb 18 per cent., while the sane population had only increased 10·6 per cent. Out of 10,000 persons there were found to be insane—

	Males.	Females.	Total.
1871	23	22	22
1880	25	23	24
Or one insane person—			
In 1871 out of	443	462	448
In 1880 „	391	432	411

This is a much surer way of knowing whether the number of the insane is increasing than from counting the number of lunatics in asylums, which is influenced by causes quite apart from the increase or diminution of the insane in the population at large; 28·6 of male lunatics, and 28·3 of female ones were in asylums in 1880. The number cared for in these establishments seems to have a connection with the material well-being of the different districts.

It was found in the census that 9,809 males and 7,827 females were born insane, 17,636 in all; and 16,088 males and 16,277 females, 32,365 in all, had become insane afterwards, while this point could not be determined in 8,412 males and in 7,932 females =16,344. The reporter does not tell us whether idiocy in Prussia is increasing or not, though he leaves the inference that it is increasing.

As regards the age of those affected with insanity, there were in 1880:—

	Males.	Females.	Total.	In 10,000.	In 1871.
Under 15 years	4,038	3,110	7,148	7·3 per cent.	7·7 per cent.
15—50 years	22,485	19,601	42,086	31·2 „	29·9 „
Over 50 years	7,313	8,686	15,999	38·6 „	31·0 „
Unknown	473	639	1,112		

Of 10,000 persons professing the Evangelical religion, 24·1 per cent. were insane; of the Catholics, 23·7; of the Jews, 38·9; and of members of other religions, 18 per cent. Of 10,000 persons the Evangelists counted 9·80 per cent. deaf and dumb, the Catholics 10·39 per cent., and the Jews 14·38. Hereditary neuroses seem thus to be commoner with the Israelites.

Statistics of Epileptics in the Rhine Provinces.—A statistical table has been made, which is interesting, as it distinguishes the number of the sane and insane among epileptics. It is as follows :—

Department.	Epileptic.	Under 14 years.	Over 14 years.	With property.	No property.	Mental state sound.	Mental state deranged.
Aix..........................	687	78	609	87	600	528	159
Coblenz	635	72	563	179	456	478	157
Cologne......................	560	94	466	74	486	425	135
Düsseldorf	1,048	136	912	209	839	808	240
Trèves	530	83	447	79	451	414	116
Total number of epileptics	3,460	463	2,997	628	2,832	2,653 or 76·7 per cent.	807 or 23·3 per cent.

Agricultural Colonies for the Insane.—At a meeting of the Medico-Psychological Society at Carlsruhe (" Zeitschrift," Band xxxix., Heft 1), Dr. Landerer, of Göppingen, gave an account of the colony of Freihof which has now lasted fifteen years. Those lunatics thought fit and able to work lived in a separate house not quite a mile from the asylum, and under the same management. They cultivated 90 hectares of ground. He had from 30 to 36 labourers out of 350 lunatics, a small proportion. He calculated that 200 lunatics were worth 50 sound labourers. Acute and troublesome cases of lunacy were not employed. The care of cattle was found the best and most profitable occupation. He recommends a hop garden as giving a profitable employment to many hands. After the discussion on Dr. Landerer's paper Dr. Riegen gave an account of what he had seen of the insane colony at Fitzjames, at Clermont (Oise).

Hyoscyamine in Insanity (" Zeitschrift," Band xxxix., Heft).—Dr. Kretz has used this drug, originally brought into notice by Dr. Lawson, in many cases at the Asylum of Illenau. Merk's Crystalline prepara-

tion was the form employed; the dose 0·01 of a gramme twice a day. The highest daily dose was 0·03, the highest dose given was 0·05. It was sometimes given in the form of subcutaneous injection. Dr. Kretz finds the following symptoms accompany the administration of hyoscyamine: A feeling of tightness and oppression in the chest, with difficulty of breathing, a diminution in the powers of vision so that they are less able to read or do fine work, and an unpleasant feeling of itchiness in the skin and dryness in the throat accompanied with numbness, giddiness and tendency to stumble. On observing the patient closely it is found that the frequency of respiration is diminished; but from five to ten minutes after the dose the respiration becomes more frequent and slowly returns to the normal standard. In like manner the pulse becomes slower, weaker and smaller, then it becomes more frequent, returning after several hours to its usual rate. The dilation of the pupil becomes visible in about ten minutes. In some cases there was a haze before the eyes; in one the patient saw red and yellow; in another the haze took the form of spectres and devils on which account the hyoscyamine was stopped.

Dr. Kretz thinks that it should not be used when there are hallucinations. He has given it continuously for five months in doses of 0·01 without injury to the general health. He points out that hyoscyamine has both a hypnotic and a calmative effect. It acts both upon the sensorium and on the motor and sensory nerves. The danger of over-doses of the drug consists in failure of the heart's action. Dr. Kretz considers that it acts most favourably where the symptoms of motor restlessness are prominent. It is also useful in soothing maniacal excitement, in chronic mania, and in fits of periodic and circular exaltation.

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5. *French Retrospect.*

By Dr. T. W. McDowall and Dr. D. Hack Tuke.

(*Concluded from* Vol. xxix., *p.* 598.)

Compulsory Feeding. By Dr. E. Régis.

The author appears to be excessively afraid of the dangers attending the passage of the œsophageal tube. To obviate the risk of pouring broth into the trachea and lungs he has invented a tube so arranged that, if by any chance it did get into the wrong passage, the operator would discover his mistake by producing temporary asphyxia. To anyone as nervously anxious as Dr. Régis we would recommend a trial of the instrument, though we are honestly of the opinion that an ordinary tube can always be passed with perfect safety if proper care be taken.

In many cases of refusal of food there is marked derangement of digestion. To cure this condition Dr. Régis recommends the washing out of the stomach with water or some alkaline fluid, such as Vichy

water. It is quite possible that in some cases such treatment may be found useful. As to the method in which it should be performed, we would not advise anyone to follow exactly the author's method. He begins by *withdrawing* the acid fluid from the stomach. It would be much safer to inject some tepid water first. All risk of injuring the mucous membrane is then avoided; for should the pump be used when there is no fluid in the stomach, the mucous surface can scarcely escape being injured.

As to the substances which should be used in artificial feeding, the author believes that the addition of peptones to those ordinarily used will be of great value. His experience leads him to believe that these highly nitrogenous matters will be readily absorbed by even the most disordered stomachs.

Clinical Cases.

I. *General Paralysis in an Imbecile.* The symptoms observed during life, and the lesions found post-mortem, leave no room to doubt that it was a genuine case of general paralysis. It is not by any means as clear that he was an imbecile. The patient's mother was insane. He was born in 1824, became maniacal in 1855, and remained at Charenton till 1860. In 1856 he had a single attack of cerebral congestion. In 1878 he again became excited. He had repeated attacks of cerebral congestion and died of well-marked general paralysis. During the whole of his asylum life he was described as weak-minded.

II. *General Paralysis. Recovery?* The author, M. Mabille, confesses that the case is one of remission of the symptoms, not of genuine recovery. Benefit seems to have followed the use of prolonged baths and setons.

III. *Hallucinations in an Old Blind Man who had been Operated on Twice for Cataract.*

The patient is an old man, 83 years of age, in good health. He is quite aware of the nature of his attacks, which as a rule last about two days and a night, during which time he cannot sleep.

During the attacks he sees himself surrounded by figures which approach him armed with daggers, but they never strike or lay hold of him. Sometimes he seizes the daggers and easily breaks them. One day he fell asleep after an attack with five daggers close to his throat, but without feeling anything. He often sees his bed filled with men, and this explains why he refuses to go to bed when he is suffering from his hallucinations. He has also seen himself surrounded by precipices.

In the intervals between these attacks he has sometimes hallucinations of a different character. He sees, for example, a table on his bed, and several people about to dine at it; he takes cakes and carries them to his mouth, but in doing so he feels nothing in his hand and tastes nothing.

T. W. McD.

Archives de Neurologie; sous la direction de M. Charcot, 1883. This excellent journal continues to be conducted with the same spirit which characterised its first appearance. It is frequently enriched with finely executed plates representing pathological changes, as in the number for May, 1883, in which a case of tubercular meningitis of the ascending frontal and parietal is represented, illustrative of the motor centres of the brain. In the same number is a continuation of the series of articles by MM. Charcot and Paul Richer (of which we have given a summary in a previous number) on the study of Hypnotism in Hysteria, with especial reference to the phenomenon of neuro-muscular hyper-excitability. Three propositions are maintained in this paper, viz.: 1. This phenomenon is reflex in character. 2. Its nature is founded upon a special modification of the activity of the central nervous system. 3. The centripetal course of the reflex arc differs from that of the cutaneous sensitive nerves. It is in the subjacent parts that these nerves must be found. It has been proved by Sacs and others that there exist in the tendons and the aponeuroses of the muscles, centripetal nerves which play a special *rôle* in muscular tonus and the functions of the muscular system. The authors think it rational to suppose that these are the special sensitive nerves through which the afferent influence is conveyed. Thus, when a tendon is tapped, its own nerves are directly involved; if a muscle is struck, the sensitive nerves of its aponeurosis or the muscle itself are excited to action. When pressure on the ulnar nerve causes in the lethargic stage of hypnotism contraction of the hand and forearm, this is not due to the direct mechanical excitation of the motor filaments of the ulnar, but to its sensory filaments, through which the action is transmitted to the medullary centre and thence reflected along the motor filaments to the muscles it supplies.

L'Encephale; sous la direction de MM. Ball et Luys. 1883. Many articles of interest appear from time to time in *L'Encephale,* among which, in the number for August, 1883, is a paper by MM. Ball and Régis on the Families of the Insane, being a contribution to the Study of Heredity. Great labour has been bestowed on this investigation, and with valuable results. We summarise what the authors say about general paralysis. These statistics demonstrate that it is not an insanity, and ought not to be classed among mental affections, for it does not originate like them in insanity, and does not engender it. On the contrary, like cerebral disorders not involving insanity, it arises from and propagates these cerebral disorders. It results that general paralytics belong, not to insane families, but to families prone to cerebral affections other than mental; that general paralysis, when hereditary, is not so *quoad* the insane element, but the cerebral one, or, as M. Doutrebente says, there is an hereditary tendency to (cerebral) congestions; that consequently general paralytics do not transmit insanity to their offspring, but head affections of various kinds; and that hence the family of a general paralytic would be prone to the

cerebral disorders of childhood and advanced life. Passed the critical period of infancy, such children manifest cerebral excitement in the form of extraordinary intelligence, and, if they survive to maturity, astonish the world by their brilliancy.

Bulletin de la Société de Médicine Mentale de Belgique. 1883. This journal, and the Society, maintain their activity. Number 31 contains an important article of 43 pages on the Classification of Mental Disorders, by M. Jul. Morel, the President of the Association. He passes in review a large number of classifications, and ends in adopting, with certain modifications and additions, the principles followed by Guislain in his well-known nosology. Dr. Morel's article should be read by all interested in the classification of mental disorders.

Rapport à l'Académie de Médicine sur les Projets de Réforme Relatifs à la Legislation sur les Aliénés au nom d'une Commission, composeé de MM. Baillarger, Brouardel, Lunier, Luys, Mesnet, et Blanche, rapporteur. 1884.

This "Rapport" was read by Dr. Blanche to the Academy of Medicine on the 22nd of January. Among other matter it contains a flattering reference to Broadmoor, and the hope is expressed that France will soon have its Broadmoor also. Ten propositions close this carefully prepared address, which, coming from a mental physician of Dr. Blanche's experience, will no doubt exert much influence in the deliberations of the Senate on the important question of a change in the French Lunacy Law, which now excites so much interest across the Channel.

D. H. T.

PART IV.—NOTES AND NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Quarterly Meeting of the Association was held February 5th, 1884, at Bethlem Hospital, at 4 p.m., Dr. Orange, President of the Association, in the chair. There were present—Drs. S. H. Agar, A. J. Boys, R. Baker, P. E. Campbell, Fletcher Beach, J. E. M. Finch, J. R. Gasquet, W. R. Huggard, H. Lewis, H. Rooke Ley, C. Mercier, G. E. Miles, P. W. Macdonald, W. J. Mickle, J. H. Paul, H. Rayner, J. B. Spence, H. Sutherland, A. H. Stocker, D. Hack Tuke, D. G. Thomson, L. A. Weatherly, E. S. Willett, T. O. Wood, &c., &c.

At the commencement of the proceedings, the PRESIDENT referred to the death of Dr. Parsey, Medical Superintendent of the Warwick County Asylum at Hatton, remarking that Dr. Parsey had been President of the Association in 1876; and also that he had completed a longer term of service at one asylum than would probably fall to the lot of many then present. Dr. Parsey went to Hatton in 1852, being the first superintendent of that asylum, and everyone who had visited that asylum knew to what a reputation it had deservedly attained under Dr. Parsey's management. There was one respect especially in

which the good work done by Dr. Parsey had often come prominently under his (the President's) notice, and that was in regard to persons charged with offences who were suspected to be of unsound mind. In a recent contribution to the Journal, Dr. Hack Tuke, in mentioning the various places where things were satisfactorily done, had occasion very particularly to mention Dr Parsey's county, recognising that the County of Warwick was especially fortunate in possessing an officer who made his experience available for the county magistrates and others in connection with the gaol. The President then proposed that a resolution of condolence should be communicated by the Secretary to the family of Dr. Parsey.

Dr. Mickle, in seconding the motion, said that he had been under Dr. Parsey for some time, and had had the opportunity of becoming acquainted with his great ability and his very great kindness. He had learnt from that gentleman much that was now of great advantage to him, and he could testify as to the thorough manner in which Dr. Parsey had attended to his duties and the kindness he had always shown to his patients.

The resolution was unanimously adopted.

The following gentlemen were elected members of the Association, viz.:—E. B. C. Walker. M.B., C.M.Edin., Assist. Medl. Officer, County Asylum, Haywards Heath; Dr. Thomas Draper, District Asylum, Enniscarthy, Ireland; Dr. C. Theodore Ewart, M.B.Aber., C.M., Assist. Medical Officer, Fisherton House, near Salisbury; Wm. Milsted Harmer, F.R.C.P.Ed. Physician Supt., North Grove House Asylum, Hawkhurst, Kent.

Dr. Savage read a paper on "Constant Watching of Suicidal Cases." (See Original Articles, p. 17).

Dr. Rayner said that the question introduced by Dr. Savage was a very interesting one, both theoretically and practically. He agreed with Dr. Savage in a very great measure in regard to the watching of suicidal patients. He thought that they should not look at the mere prevention of suicide. If they were fortunate enough to escape suicides they ought to make themselves very happy in their good luck, but it was not a thing to pride themselves upon. Greater results would be obtained by treating the mental state upon which suicide depended, rather than the suicidal impulse. It was quite possible to develope and encourage a suicidal impulse. By too much attention this might be developed and cultivated just in the same way as refusal of food. In cases of simple melancholia, with suicidal tendency, he had found frequently that it had subsided with rest, just as in the case of refusal of food. When the patients had well rested and had begun to gain flesh he tried to get them up and out, and he relied a great deal upon the effect of fresh air. As regards the watching, the less the patient was irritated by the means adopted the better. In quiet cases he (Dr. Rayner) simply put the patient into a small dormitory of four beds in the Infirmary, which was not under constant but under frequent supervision. Beyond that, Dr. Rayner had no very special provision for suicidal cases, and yet he had been very fortunate.

Dr. Ley said that he thought that the majority of suicides did not occur from actively suicidal patients, but from those who had not been suspected. Patients could be as well watched in a single room with an opening through which the night attendant could see in as in an associated dormitory. Probably the reason why the Commissioners in Lunacy laid so much stress upon patients being watched at night was that they thought—and, he thought, very justly—that all patients should be watched at night, and that the number of night attendants should be increased much more than they were at the present time. A great deal was done in the daytime, but very little in regard to night supervision. Many bad practices might be remedied by a better supervision at night. With regard to the use of associated dormitories, there might be some difficulty in the case of a male patient, but women did not mind them half so much as men.

Dr. Hack Tuke enquired of Dr. Ley whether the bright light thrown into the

room through the slit referred to had been found to interfere with the patients comfort or sleep.

Dr. LEY said not at all.

Dr. FINCH referred to the fact that the Commissioners' Report usually contained some reprimand that such and such a case had committed suicide, although he was to be "constantly watched." If what was thus implied by the Commissioners were actually carried out, it would make life perfectly miserable. With respect to light cast into a room through a slit in the door, he might quote the case of a suicide occurring where there was a very careful night-nurse, who went into the room every half-hour, and, although the patient had committed suicide, the nurse thought her still asleep. The patient had strangled herself with a portion of her night-dress, and when he (the speaker) saw her, although she had then been dead more than an hour, she had still every appearance of being asleep.

Dr. HUGGARD enquired as to the means of restraint referred to by Dr. Savage. He also referred to one of the answers to the Commissioners' circular, which stated that, in the experience of the correspondent, suicides were invariably at night. Was that the experience of most of the members? No doubt a great deal of watching did harm; at the same time little watching might be as objectionable, and might lead to suicides.

The PRESIDENT said that the object of any well-regulated system was that there should be adequate supervision without making the patient unpleasantly aware thereof. It was unquestionably desirable that the treatment should not impair the chances of cure, but a patient could not be cured if not kept alive. He was glad to hear Dr. Rayner say that he treated suicidal patients in bed. He had done that himself for many years, and his infirmary wards were, as much as possible, like hospital wards. So far from objecting to the recommendations made by the Commissioners in Lunacy in the direction of increasing the number of attendants on duty by night, he always hailed their recommendations with unfeigned delight, for he felt sure that enough had not been done in regard to night supervision. The patients who were sent to the asylum with which he was connected, were patients who required special watching, and, therefore, a larger staff was required. They had, therefore, at all times, twelve attendants upon duty during the whole of the night, those attendants doing no work during the day. They patrolled the ordinary wards at frequent intervals, whilst the infirmary wards were never left either night or day without someone on duty. The patients, therefore, did not think they were especially placed there to be watched as suicides. Any kind of watching which tended to impress this upon the patient was, as Dr. Savage had so well pointed out, injurious.

Dr. SAVAGE, in reply, said as to night supervision, of course the most perfect asylum would be that where watching was so automatic and well arranged as to be unobserved by the patient. He approved of the infirmary treatment if it could be a combination of the infirmary treatment with the single room treatment, and, at all events, he should be happy to try the effect of putting suicidal people to bed. The strong clothing to which Dr. Huggard referred was not a "straight jacket." The garment was—well, it was a combined garment, buttoned down behind—without gloves, which were not usually put on unless the patient endeavoured to gouge out his eyes or otherwise maltreat himself. The sheets were of the same strong material, so that, except with the aid of his teeth, the patient could not tear it. He had had several patients who had attempted to commit suicide just as they were beginning to mend, and there were many cases where suicide was not suspected until it took place. It was a question whether the more determined suicidal cases would not be more dangerous by day if as strictly watched by night.

Dr. GASQUET read a paper on "Some of the Mental Symptoms of Ordinary Brain Disease." (See Clinical Notes and Cases.)

The PRESIDENT asked in how many cases there had been a post-mortem examination?

Dr. Gasquet replied in three of them ; he had mentioned that in which it was omitted.

The President enquired whether there were adhesions of the membranes?

Dr. Gasquet said there was an absence of adhesion or the usual physical signs of what was known as general paralysis. In reply to Dr. Savage, he said that the case of disseminated sclerosis was 52 years of age.

Dr. Savage said that it struck him that that was rather an advanced age. The only case he had seen at Bethlem was that of quite a lad. The points were of great importance. Were they to have any touchstone which would enable them to say—"That is not a case of general paralysis?" In regard to exaltation of ideas, where the patients had a feeling of well-being, they seemed to live from moment to moment—he believed they had no memory of what they had been—but Dr. Mercier would, he hoped, give his view of what the basis of exaltation was in the two cases—the one who was degenerating and losing self-control, and the other who, with a sudden blow, as it were apoplectic, was at once reduced to that condition of restless exaltation. There was one patient then at Bethlem about whom they had doubts. Dr. Hack Tuke said—"Well, what right have you to consider this case one of general paralysis rather than one connected with arterial changes." My opinion was given in favour of general paralysis because of the rapid and complete recovery after each fit. I have had one general paralytic who, for a long time, although he was a doctor, did not appreciate that he was in any way paralysed, but when later he got distinct signs of paralysis, he shook his head and said—"Well, I am paralysed now!" and recognized the fact, although he did not do so before. At present they had been taking hold of the two ends of a stick and attempting to bring them together.

Dr. Mercier said that in regard to delusions of grandeur associated with brain disease he might say that so far as he knew they were not able to give any explanation, but there was a clinical entity which they termed general paralysis, and in that clinical entity several definite symptoms were associated, but here and there they found cases in which one symptom or other was absent, and then there was another set in which the remaining (exaltation) was absent. Probably the cases quoted by Dr. Gasquet were cases of what the French called megalomania, and in ordinary cases of megalomania they would often find gross lesion of brain substance similar to what Dr. Gasquet mentioned.

Dr. Hack Tuke said that he could not help thinking that ideas of grandeur might be associated with some morbid condition of one part of the brain rather than another and not be merely a consequence of the loss of control exercised by the supreme centres in health. Inability to compare the present condition with the past—loss of memory—arose in cases of ordinary dementia ; but there was something special in cases of general paralysis with exaltation and of megalomania, and he thought that common to them all there might be some lesion locally different from that which took place in other cases.

Dr. Mickle said he thought that the question raised by Dr. Gasquet as to the existence of delusions of grandeur had been decided in the affirmative. The existence of delusions of grandeur, simply defined as delusions of grandeur, would apply to a very large number of cases of insanity which had nothing whatever to do with general paralysis; and even if they left out the systematized delusions of grandeur—even if they took into consideration only the delusions of grandeur of the same kinds as were found in general paralysis—they found them in a great many forms of brain disease. The very first case mentioned by Dr. Gasquet (multiple sclerosis), was, as regards its mental symptoms, the same as one of the very first cases of multiple sclerosis described in medical literature, which case had delusions of grandeur very much like those described. As regards the second case described, it struck him that the case, after all, was perhaps one of general paralysis, but of course in the absence of a post-mortem a definite conclusion could not be come to. With reference to the second question, as to whether delusions of muscular

strength were to be associated with general paralysis, he thought they might answer that in the negative. Many cases had not only no delusions of muscular strength, but they had delusions of muscular feebleness. Many general paralytics had the idea that they were extremely small and feeble, and that their muscular power was less than it really was, and this sometimes with exalted delusions on other subjects.

The PRESIDENT adverted to the double sort of nomenclature running through the matter under discussion. In one case megalomania was spoken of, and in another general paralysis. One referred to mental symptoms and the other to bodily symptoms; and it must always be open to doubt whether the term "general paralysis" ought to be used to describe a definite form of mental disease.

Dr. GASQUET said that he did not think that Dr. Mickle had quite apprehended his second question, which was not whether general paralytics had no delusions of strength, but rather whether other cases, not general paralytics, who had delusions of grandeur usually exhibited no delusions of strength.

In the absence of Dr. Major, Dr. HACK TUKE read a paper which had been forwarded by that gentleman: "The Results of the Collective Record of the Causation of Insanity." (See Original Articles.)

The PRESIDENT said that they all regretted that Dr. Major was not able to be present. He had no doubt that some useful and interesting observations would be made. In discussing this paper, upon which Dr. Major had bestowed great industry, much might be said upon each individual point; but looking at the matter broadly, it was obvious that there were two distinct modes in which the preparation of the table might be undertaken. One method consisted in ascertaining as far as possible the number of instances in which any particular factor which might be regarded as a cause of insanity had occurred; then tabulating the results, then adding up at the end the number of cases treated, and then showing in how many cases certain factors were present. This might be termed the mechanical or self-registering method. The other method might be termed (as opposed to the first) the "human" method, and in pursuing this method it was intended that each person who made an observation should bring his own judgment to bear upon it. He supposed that was the method chiefly adopted, and he was sure it was one from which an immense amount of good might be expected. If no cause could be assigned one must say so: but if each individual observer would weigh all the facts and then record what he thought was the probable cause he felt perfectly certain, that taking into consideration the number of highly skilled observers, there must be a good result.

Dr. HUGGARD said that he must confess that he could not altogether agree with some of the conclusions which were drawn from the tables in question. Although the facts stated by the Commissioners were extremely interesting, he thought that drawing an inference was a much more complicated matter than appeared at first sight. The figures which Dr. Major laid before them in his appeal to the sceptic, did not appear to him to possess any cogency at all, and his conclusions from the frequency of the so-called causes, were open to question; in fact it would seem that the whole paper was really lodged upon fallacy, regarding the *post hoc* for the *propter hoc*. Causation must be arrived at from comparison and not from simple observation, otherwise, it was impossible to say which was the cause and which only an ordinary antecedent. He did not think the table could be called a collective record of causation; at the same time the paper was a very interesting one, and there was a good deal of suggestion in it, although it did not proceed upon a record which was calculated to lead to altogether trustworthy results.

Dr. MERCIER said that he could quite agree with what the President had said as to the industry bestowed upon the paper, but he must also agree with Dr. Huggard as to its value. He believed the conclusions given in the paper to be absolutely worthless, being founded upon data that were utterly untrustworthy, unreliable and invalid. To set down causes of insanity as they were

set down in the table of the Association appeared to him an unwarranted assumption. "Antecedent circumstances" were as much as we could dare to say; contributory circumstances even we might venture to speak of, but certainly not of causes. What were the sources of the statements found in the tables? They were got from the statements of relieving officers, of patients' relatives and of the patients themselves. What was the value of a scientific conclusion founded on the statements of lunatics? All the statements as to cause were obtained from people who were unintelligent, uneducated, and had received no scientific training. It was characteristic of such people that they would find some cause or other for every occurrence, quite apart from any evidence of the existence of a causal relationship. Even educated people of some intelligence attributed changes in the weather to changes in the moon, when the most superficial observation would show that there was no connection between them. They had all heard of the gentleman who noticed an unusually large number of snails in his back garden in the same year that York Minster was on fire, and who discerned a causal relationship between the two events. He thought that the statements as to the causes of insanity found in their tables had a validity about equal to that of the case he had mentioned. The speaker then went seriatim through the table, showing the sources of fallacy that, in his opinion, vitiated each of the statements therein; pressing with special insistance upon the headings of Drink, Epilepsy and Previous Attacks. Dr. Major had laid stress upon the greater frequency of drink as a cause of insanity in males than in females. It might be so, but we could not safely infer it from the tables. One source of fallacy was the freedom with which men admitted the charge of intemperance as against the reticence of women. He referred to a case in which a woman, the keeper of a station restaurant, was admitted suffering from what was manifestly and unquestionably delirium tremens. She denied that she ever touched liquor; her husband denied it; her brother denied it; her sisters, and her cousins, and her aunts denied it; yet the woman was unquestionably and indisputably a drunkard. If pregnancy, lactation, and the puerperal state were true causes of insanity, how were they to account for the millions and millions of women who underwent their experiences without becoming insane. If epilepsy was a cause of insanity, what were we to say of those numerous cases in which the insanity precedes the epilepsy. When previous attacks were alleged as a cause of insanity, it was only the respect he entertained for the gentleman who drew up the table, that withheld him from calling the statement absurd. He might as well call yesterday's dinner the cause of to-day's. If a previous attack was the cause of a present attack, it would be equally reasonable to say that an initial attack was the cause of a relapse, or that an outbreak of insanity a fortnight ago was the cause of the patient getting worse now. In his opinion the proper treatment of this table of causes would be to convert it into a *tabula rasa*, and that they should substitute for it a table of antecedent causes probably contributing to the attack; but that they should not arrogate to themselves a knowledge of causes of insanity of which, as yet, they were almost wholly ignorant.

Dr. Savage quoted Griesinger as an authority for the use of the word cause, although perhaps it could only be considered so in a slight sense of the word; and he thought it would be a good thing if they took Dr. Mercier's advice, and were more cautious in the use of the language they used in their tables. Possibly the tables might be improved. The word "cause" might be a mistake as it was at present used, and it might be better if they used the word "condition," but the word "cause" in a certain sense would have to come in. Even Dr. Mercier made use of it before he sat down, saying "antecedent causes."

Dr. Hack Tuke explained that the ætiological table adopted by the Association, was simply that already in use by the Lunacy Commissioners in their Annual Report. The Statistical Committee, while aware of its imperfec-

tion, could not agree upon one so much better as to justify them in giving Superintendents of Asylums the trouble of preparing two tables, where one would suffice. In regard to the general question, he thought they were constantly confounding two things which were totally distinct. Take intemperance for instance. One question was, if a hundred males and a hundred females were subjected to the action of alcohol, in excess, would one sex be more liable to become insane under its influence than the other? The other question was (and the object in asking it was entirely different) were men or women more frequently made insane through intemperance? Their statistics showed that many more men went insane from this cause, or he supposed he must say, "contributory circumstance" or "antecedent condition," for they need not quarrel about the particular term used. But though men were more frequently made insane by drink than women, it by no means followed that this indicated the relative liability of the male and female brain to alcoholic insanity. It might only show that one sex was more exposed to the temptation to drink to excess than the other. He (Dr. Tuke) only mentioned this as one instance of the confusion of thought constantly fallen into. Both questions were important. If our tables should show in the future an increase of alcoholic insanity among women, it would be an important fact, having a practical bearing upon intemperance, for they would strive to remove as much as possible the antecedent condition. He (Dr. Tuke) had himself made some investigations on a tolerably large scale in 1857, as to the influence of intemperance on insanity, and he had placed it at about 13 per cent., at a time when 50 per cent. was frequently spoken of as the proportion. The tables of the Commissioners placed it at about 14 per cent., and some enquiries carried on at Wakefield, pointed to 15 per cent. Such an amount of uniformity in the results when independent and careful researches were made, showed that valuable and approximately correct conclusions were possible, and that was all he contended for. The other day, a patient was admitted into Bethlem Hospital, the cause of insanity assigned being the change in the weather. But do we find this cause put down in 14 per cent. of the admissions into our asylums? There is then a limit to absurd statements as to causes, and we must look to the broad results. When Dr. Mercier argued that in consequence of the loose statements about the influence of puerperal conditions in relation to insanity, they could not be accepted, this seemed, if he might say so, a *reductio ad absurdum*, for it was carrying scepticism to such an extent, that we were led to ignore one of the most certain causes of insanity. No doubt some of the criticisms made by Dr. Huggard and Dr. Mercier had force, and especially would it be desirable to collect statistics showing the degree in which the causes of insanity might be in full force without any of their supposed effects being witnessed, so as to avoid the *post hoc* fallacy. Still he (Dr. Tuke) was strongly of opinion that there was a great gain from this ætiological enquiry, and he had hoped that the sceptics would have been more convinced than they had been by Dr. Major's valuable paper.

The President congratulated the meeting upon the interesting discussion that had been provoked by Dr. Major's paper. They were especially indebted to Dr. Mercier for the spirit and life that he had infused into the discussion. Dr. Mercier had been very clear and decided in the judgment passed by him. He (Dr. Mercier) had no doubt at all that the table of causes should be a *tabula rasa*. The fact that the table provided under the heading "unknown," a haven of refuge for cases of insuperable difficulty, did not propitiate Dr. Mercier. Nothing would suffice short of an absolutely clear sheet. But when Dr. Mercier came to give his reasons, in some detail, for the heroic treatment recommended by him, it became clear that Dr. Mercier would himself become, in future, a most trustworthy contributor to the table. After enumerating the difficulties besetting the path of the observer, he gave us an instance, that had occurred in his own practice, in which the most ingenious attempts had been made by the relatives of his patient to deceive him as to

the cause of her malady, but, in which, his skill and acumen enabled him to expose the intended deception, and to fasten securely upon a very definite cause. It was the case of the keeper of the station restaurant. Her sisters and her cousins, and her aunts had all protested that from the day of her birth she had never touched anything but the purest filtered water; and yet, when Dr. Mercier set himself to examine into the case, he tells that he had not a shadow of a doubt that the woman's condition was caused by drink. Now here was at least one good and thoroughly trustworthy observation. Let not, therefore, Dr. Mercier leave his table an entirely blank sheet. Let him, if he feels constrained so to do, place all his other cases under the heading "unknown," but let him at least place this one well observed case, boldly down in the centre of the sheet under the cause brought to light by his careful inquiries. By degrees other equally well observed cases will accumulate around this nucleus. The number of cases under the heading "unknown" will gradually diminish; and the table, instead of being a *tabula rasa*, will become, on leaving Dr. Mercier's hands, a valuable contribution to science. By the care taken in proving that one case that he had related, Dr. Mercier had shown himself to be largely endowed with the qualities of a good observer, able to draw a sound conclusion from the facts presented to him. Let not, therefore, his diffidence prevent him from recording his conclusions in the table for the benefit of others (laughter and applause).

The PRESIDENT then proposed a vote of thanks to the Treasurer and Governors of Bethlem Hospital for kindly allowing the use of the room, and begged Dr. Savage to favour the Association by conveying the vote.

The proceedings then terminated.

A Quarterly Meeting of the Medico-Psychological Association was held at the Royal College of Physicians, Edinburgh, on Friday, 16th November, 1883. Present: Drs. Rorie (chairman), Blumer (New York), Clouston, Urquhart, Turnbull, Yellowlees, Ronaldson, Clark, McPhail, Mitchell, Ireland, Johnstone, Rutherford, &c.

Dr. CAMPBELL CLARK read a paper on "The Special Training of Asylum Attendants." (See Original Articles, Jan., 1884).

The CHAIRMAN stated that this was not a new departure. It was begun by Dr. Browne when physician to the Crichton Royal Institution nearly 40 years ago. He delivered courses of lectures to his attendants which were still well worthy of study by members of the specialty. Dr. Mackintosh at Gartnavel many years ago also instructed his attendants to take notes of cases, to observe the state of the tongue and pulse, to pass the catheter, &c.

Dr. CLOUSTON said that Dr. Clark in his able paper had awarded him too much praise. Dr. Browne was undoubtedly the first who moved in the important direction of giving systematic training to attendants. He however had written a paper on the subject, and had sent circulars to the Royal Asylums, which, having funds at their own disposal, were better able to initiate a scheme for the training of attendants, but it came to nothing. It had been reserved to Dr. Clark, a former member of his staff, to solve the problem by putting into practical form a scheme of which all must approve in principle, and many doubtless would put into practice. Dr. Clark had done him the honour to ask him to look over the papers written by his attendants, and he had seldom been more surprised than to find ordinary asylum attendants giving almost as good an account of cases of hallucinations and delusions and arriving at conclusions as sound as any ordinary medical attendant could have done. These papers were not speculative in character, but correct statements of actual fact. He mentioned as supplementary to Dr. Clark's paper that when reorganizing the female hospital at Morningside, he determined that all new attendants should pass through it, and be taught the nursing of the sick. For

the first three months they were taught the nursing of bodily ailments and of acute mental diseases. The arrangement had worked well. It had now been in operation for a year and a half. It was found difficult to get the attendants to leave the hospital, the duties were so much more interesting that they thought it almost a hardship to go to the ordinary wards. The training of attendants he thought should begin in the hospital where they would learn to realize the individual necessities of the patients, by attendance on cases such as general paralysis, puerperal mania, acute mania, and other forms of insanity with obvious bodily symptoms—such as sleeplessness, deranged digestion, &c. They thus learned to recognize what was important to observe and to record.

Dr. Ronaldson said that he had recently given a lecture on "What to do in Emergencies," which was attended by many of his staff, and was followed by good results.

Dr. Ireland said that he had read the essays written by Dr. Clark's attendants and had been much struck by the acuteness of observation they displayed. In practice it must be admitted that we all were benefited by hints from attendants, they often might observe things which the Medical Superintendent could otherwise know nothing of. General Washington, who was a man of sense and sound judgment, used to consult his staff as to what should be done in the exigencies of war, indeed he seldom originated his plans, but took the best advice and acted accordingly. Much benefit he was sure would result from the training of attendants. It had been begun by Dr. Browne, and continued by Dr. Mackintosh and other gentlemen, but never hitherto put into systematic form. This should now be done, and he thought that attendants should be encouraged to study, to answer questions, and to obtain certificates. Dr. Clark's suggestion that a manual or text-book be prepared was a good one, and should be set a-going.

Dr. Urquhart said that this question had been forced upon him owing to the copies of his asylum-rules having become exhausted. He had always felt that asylum-rules were unsatisfactory, so much so that he had commenced to write a short manual for the use of his staff. There was a question he might ask. Should the attendants be expected to study when off duty? Of one thing he was certain, that the old system of going round the wards with the matron and ignoring the attendant was becoming obsolete. Good attendants were much more valued and taken into the Superintendent's confidence than they used to be.

Dr. Yellowlees, though much impressed with the importance of the subject, was not so enthusiastic as Dr. Clark. He had tried lecturing and had not got such good results; true, he had not aimed so high. He considered that the best attendants were those who in the wards were open to instruction, and that very little good resulted from lectures. Direct personal, individual teaching afforded instruction more valuable. He had recently drawn up a code of instructions for his attendants. All who really cared for instruction studied them, and tried to work up to them; to those who did not, lectures would be of little avail. As a rule the attendants, like the whole asylum, took their tone from the Medical Superintendent. He was certain that most of the gentlemen present would rather train their own attendants than take them from other asylums, however highly trained they may profess to be. He agreed with Dr. Clouston in thinking that attendants should be trained in the infirmary, and that this gave them a medical idea which was of value, but he didn't think that any grand scheme of teaching and examinations would succeed. Each Superintendent would continue to work his asylum in the way best suited to himself. It was an important matter to have a staff of good nurses for outside cases, if it could be done without injustice to the institution.

Dr. Howden said that he endorsed all that Dr. Yellowlees had said. He would not, if he could help it, take attendants, however highly trained and certified, from other asylums.

Dr. RUTHERFORD was of the same opinion.

Dr. TURNBULL said that when the idea was first started he was not enamoured of it, but the more he thought of it, and having seen the papers, the more he was in favour of the carrying out of Dr. Clark's scheme.

Dr. CLOUSTON then moved, and Dr. URQUHART seconded, "That a committee of the medical officers of the asylums of Scotland be appointed by this meeting for the purpose of considering the questions of :—(1) The special training and instruction of asylum-attendants, and the best modes of doing so. (2) The preparation of a manual of instructions for nursing and attendance on the insane," which was carried.

A Committee was then nominated, consisting of all the gentlemen present, and of any member of the Association in Scotland who desired to join it. Dr. Clark to be convener.

Dr. J. BRUCE RONALDSON read a paper on "Murder during Homicidal Impulse."

Dr. YELLOWLEES said that although such cases were called impulsive, the acts were often prompted by delusions, and the result of them. When asylum-officials were attacked, there were generally motives. Doubtless if we could look into the minds of those patients we should see that there were delusions which overpowered them, and when we hear of patients asking that their hands might be tied to prevent them from doing injury, we have a proof of this. The risks which asylum-officers run are not fully realised.

Dr. HOWDEN said that he had a case recently transferred to the Criminal Asylum at Perth by appeal to the Home Secretary. He had attacked an attendant and fractured his skull, and had made several attempts on himself.

Several of the members mentioned similar cases.

Dr. HOWDEN read a paper, "Precautions against fire in Lunatic Asylums" (see Original Articles), which was followed by an interesting discussion.

The members afterwards dined together at the Royal Edinburgh Hotel.

A Quarterly Meeting of the Medico-Psychological Association was held in the Hall of the Faculty of Physicians and Surgeons, Glasgow, on Tuesday, 21st February. Present: Drs. Clouston (chair), Clarke, Robertson, Turnbull, Urquhart, Ireland, Yellowlees, Rutherford, Rorie, Love, &c.

George S. Pullen, M.B., Edinburgh, and John Love, M.B., Glasgow, were elected members of the Association.

The report of the Committee on the special training of asylum attendants was read as follows :—

"At a meeting of the Committee appointed at last Quarterly Meeting to consider the best means of training asylum attendants, it was resolved that a short manual of instructions be prepared, comprising :—(1) Simple physiology in its practical bearing on the insane. (2) The symptoms of bodily and mental diseases, which should be observed and reported. (3) The nursing of the sick. (4) The management and care of the insane. (5) The duties of attendants as servants of the institution.

"The following gentlemen were appointed an editorial Sub-Committee :—Drs. Urquhart, Turnbull, Clark, and Maciver Campbell, with instructions to prepare and submit proofs of a short manual of instructions to asylum attendants to the Committee.

"Convinced of the importance of the special training of attendants, the Committee hope that the manual may be useful as a means to that end, and invite reports of the results of such instruction as may have been given."

Dr. ROBERTSON moved, and Dr. IRELAND seconded, that the report be adopted and the Committee reappointed, which was carried.

A discussion on "Thought-reading" followed, and the meeting was adjourned, to meet in Perth at an early date.

The members afterwards dined at the Bath Hotel.

A CORRECTION.

[It is requested that the following Table may be substituted for the Table printed at the foot of page 92 of the Thirty-seventh Report of the Commissioners in Lunacy to the Lord Chancellor.]

The following are the details of the average weekly cost :—

	County Asylums.			Borough Asylums.		
	£	s.	d.	£	s.	d.
Provisions (including malt liquor in ordinary diet) ...	0	4	4⅛	0	4	7⅛
Clothing	0	0	8½	0	0	9⅞
Salaries and wages	0	2	2¼	0	2	5¼
Necessaries (*e.g.*, fuel, light, washing, &c.)	0	0	10⅝	0	1	3⅛
Surgery and dispensary	0	0	0¾	0	0	0¾
Wines, spirits, porter	0	0	0⅞	0	0	0⅝
Charged to Maintenance Account :						
Furniture and bedding	0	0	4⅞	0	0	5⅞
Garden and farm	0	0	6½	0	0	6
Miscellaneous	0	0	3¾	0	0	7¾
	0	9	6¼	0	10	10⅜
Less moneys received for articles, goods, and produce sold (exclusive of those consumed in the Asylum)	0	0	3⅛	0	0	2⅞
TOTAL Average Weekly Cost per Head ...	£0	9	3⅛	0	10	7½

MEM.—The errors in this Table as published arose from displacement of type after return of a *correct* proof.—C.S.P.

MEDICAL JOURNALISM.

Development in this direction indicates no abatement of enterprise or ability. Dr. Richardson has shown that, in spite of increasing years and total abstinence, his natural force has not abated. "Animus hominis semper appetit agere aliquid," as Cicero says, and when the "something" is worth doing, it is a happy thing that such is the law of life. He has resumed a publication long since laid aside, and we have before us a new series of "The Asclepiad," a quarterly journal devoted to original research and observation in the science, art, and literature of Medicine. The remarkable feature of this serial is that all the contributions are by the same hand. This is laborious work. There is certainly the compensating advantage, however, that the Editor will never fall out with his contributors; will never wound their feelings by rejecting an article, and will never give offence by giving precedence of position to one article over another. Not the less, however, will he have to exercise judgment in the admission of his own writings, to be a just judge in his own cause (a rather delicate position), and as

such he will merit condemnation, *cum nocens absolvitur*, or rather, when an inferior article is admitted.

The first number in no respects calls for condemnation; on the contrary, the papers are pleasant and instructive reading, and many freshly-thought and freshly-expressed passages occur. In the article "Morphia Habitués and Their Treatment," the writer confines himself to the subcutaneous injection of morphia. It is a valuable essay, and were there no other than this and "Felicity as a Sanitary Research," the current number would be worth its price. We hope that the same interest will attach to future issues of "The Asclepiad," which, we trust, will meet with the encouragement and support the author so greatly merits.

An old friend with a somewhat new face made its appearance with the present year—the "Medical Times and Gazette." In wishing it success, we may cite from the editorial article of the first number, "that its first aim will be to make it essentially a clinical journal." Its small size is claimed as a recommendation, as "it renders it a necessity to select only the best original articles and cases that are offered to us; it makes padding superfluous, and it is a constant reminder to the Editorial Staff to say all they have to say as tersely as possible."

AFTER-CARE.

EXTRACT FROM SERMON BY REV. H. HAWKINS AT ST. MARY'S, OXFORD, 29TH JANUARY, 1884.

"Is it allowable to avail myself of the present occasion to beg an interest in your prayers, on behalf of a large class of grievously afflicted persons whose visitation is that of *mental* rather than of bodily disease, though often physical and mental ailments are in combination?

"Ministerial work, extending over many years, among the infirm in mind, and carried on in a hospital containing more than 2,000 patients, may perhaps justify or excuse me in requesting some special remembrance in prayer of the large community of sufferers from mental disorders. It is very numerous. In addition to those patients belonging to the higher ranks and wealthier classes of society, there are probably not fewer than 60,000 in the various public hospitals of this country.

"Among these, though the great majority belong to the lower classes, are numbered many men and women of education and refinement—members of professions and literary vocations, teachers male and female, and others who, from their position in society, have sunk, and so are most to be pitied, to a low estate.

"The causes of those mental maladies by which so many of our fellow creatures are afflicted are various. Numbers suffer the consequences of their parents' faults. In an enfeebled mental organization they bear the iniquity of their fathers. Penury and privation prostrate others. Not a few are brought from these causes to that hospital just referred to, from the vast region of East London. Again, failure, disappointment, competition, and other anxieties of business, perverted religious emotions, above all, intemperance and excess, are contributories to that most grievous form of disease.

"Among those afflicted ones are many whose morbid mental condition does not lessen but rather enhances their capacity for profiting by the ministrations of religion; many who, constant at daily and Sunday worship and Holy Communion, are regular remembrancers for others, and are comforted by the hope that intercessions are offered by others on their behalf.

"Some persons in quest of an interesting and novel field of labour might find work to do on behalf of these afflicted ones, which would yield useful results.

"There are many lonely and friendless inmates of asylums appreciative of sympathy and kindness, who might be comforted and cheered in ways which cannot now be indicated by friends from 'without;' many who might be encouraged and upheld on quitting their retreat, and renewing life's struggle, by seasonable '*After-care*' exercised on their behalf; nor would such ministries be least among those which help to stablish Christ's Church, and make His name a praise.

"In another communion there exists a society which specially devotes itself to the interests of the infirm in mind. Perhaps in due time some will be found among ourselves to accept a similar charge as their own special work."

[We desire to draw attention to the usefulness of the "After-care Ladies Working Society" in aid of the association of the After-care of poor and friendless female convalescents on leaving the asylums for the insane. The object of this Society is to assist poor female convalescents, after leaving asylums, with gifts of clothing according to the special requirements of each case. The annual subscription is five shillings. Gifts of dresses, &c., are thankfully received. Communications on the business of the Society to be addressed to Mrs. RICHARDSON, Parkwood House, Whetstone, N.; or Miss HAWKINS, Chaplin's House, Colney Hatch, N.—EDS.]

FIRE AT HAYDOCK LODGE, ASHTON, LANCASHIRE.

About half-past nine on Wednesday evening, Feb. 20th, the drying-room adjoining the laundry was discovered in flames. Mr. Beaman and Dr. Shaw were at once told, and the fire bell rung to summon the Asylum Fire Brigade. In a few moments after the discovery of the fire, extincteurs, hand-pumps, and water-buckets were used in order to extinguish it, and the Fire Brigade having very quickly assembled and fixed hose to the hydrants, jets of water were soon playing on the burning part of the building. The wind was blowing almost a gale, and as there was a lot of dry woodwork about the laundry and drying room, and the linen store adjoined them, the flames spread very rapidly, and gained ground in spite of all endeavours to put it out. The engine was situated immediately under the drying-room, and the floor of the latter soon fell in and stopped the pumps, and thus partly cut off the supply of water. Almost immediately after the discovery of fire, a messenger was despatched to Ashton and another to Messrs. McCorquodale's, of Newton Bridge, to summon the Fire Brigades, and the latter fortunately had a manual engine, which, on its arrival, was at once taken to the fish pond, where there is an abundant supply of water. By this time the fire had made considerable progress, and the most combustible part of the building was destroyed; and as there was now plenty of water the flames were soon got under.

Soon after the fire began, it was thought there was some danger of it extending to the front main block, and Mr. Beaman and Dr. Shaw ordered the building connecting the main block with the part where the fire was, to be knocked down. Dr. Shaw also saw that the patients in the front block were removed to another part of the Asylum, not in any way connected with the burning portion. No excitement was observed amongst the patients, and they were never in the slightest danger.

The laundry was situated in an old wing extending backwards from the main front block, where Mr. Beaman resides, and this old wing, which is the administrative department, was all destroyed with the exception of the kitchen and bakehouse, which were fortunately very little damaged.

Although the building destroyed was very old, considerable damage was done, and it will take several thousand pounds to put up and furnish modern buildings. In the meantime temporary places have been fitted up, and though a great incon-

venience to the staff of the Asylum, the work of the institution has gone on almost as usual.

The origin of the fire is still a mystery. The flames could be seen for miles around, and soon after the fire began several hundreds of people assembled outside the building.

The damage is partly covered by insurance.

A. F. M.

Obituary.

JOHN DALE HEWSON, L.R.C.P. LOND.

In recording in this Journal the death of a well-known member of our Association, the late Medical Superintendent of the Coton Hill Asylum, Stafford, we cannot express the sentiments of those who knew him, better than in the following brief notice which appeared in the "Staffordshire Advertiser":—

THE LATE DR. HEWSON.—To a wide circle of friends in this county, and also in the county of Wilts, the death of Dr. Hewson, the Medical Superintendent of Coton Hill Asylum, which took place on the 10th inst., has brought deep sorrow and a sense of irreparable loss. He was appointed to his office in 1853, and had just entered upon his 31st year of service. When he first came to Stafford the building at Coton Hill was not completed, but early in 1854 he was prepared to receive his first instalment of patients. He very soon won the entire confidence of his committee, and well did he vindicate that confidence. His skill and devotion brought the place rapidly abreast with the foremost of its class; and now that unfinished pile of brick and mortar which they entrusted to him thirty years ago, his dead hand yields back to them, a full and well-organised institution, second to none in the kingdom. Coton Hill is, in part, a charitable institution, and Charity herself could not have chosen a kinder hand to dispense her delicate and, in such association, her necessarily secret succour than that of Dr. Hewson. He had for many years a most able, devoted, and considerate coadjutor in his wife. He never thoroughly rallied after the shock of her illness and death, which happened about three years ago, but gradually gave way before the inroad of the disease which finally proved fatal to him. He bore the lassitude and utter helplessness of the closing weeks of his life with much placid and often cheerful resignation, and at the last he passed very peacefully away. Dr. Hewson was one of the most genial, generous, and open-hearted of men, and inspired all who were conversant with him with no common degree of attachment to him. He possessed in a wonderful manner the real, though often unconscious, confidence of those under his charge; and if a sympathy which never faltered under the hardening influence of constant familiarity with one of the saddest and most inscrutable of human maladies deserved such confidence, well was he worthy of it.—"The Staffordshire Advertiser," Nov. 19th, 1883.

WILLIAM HENRY PARSEY, M.D., B.A. LOND., F.R.C.P. LOND.

At the County Lunatic Asylum, Hatton, near Warwick, on the 10th of Jan. last, died Dr. W. H. Parsey, for more than thirty years the Medical Superintendent of that Institution. During his superintendency the asylum had doubled or trebled in numbers and size, notably by the erection, some thirteen years ago, as an annexe to the lunatic asylum, of a large separate building for the reception of the idiot and imbecile poor of the county.

Dr. Parsey held the degree of M.D. of the University of London, the Fellow-

ship of the Royal College of Physicians, London; and in 1876 was President of the Medico-Psychological Association, and gave an address at its annual meeting. Dealing with the question of the provision for the insane poor, and offering several important suggestions and reasonings in support, his Presidential Address will long be remembered by those who heard or read it.

To one who had the good fortune to work under him for a time, it is a sad privilege to have the opportunity of writing a few words of him by whose death our Association now suffers a heavy loss.

Dr. Parsey's scientific acquirements were of a high order. When a student, and in early professional life, he laid the foundations of, and built up, a wide and accurate knowledge of his profession; he maintained this throughout life by careful reading and observation, and by a deep interest in, and use of all the advances of medical science. But his tone of mind was judicial. He did not too hastily adopt any new theory or method of practice, but carefully tested it by comparison with the established in science, and by practical trial. Selecting the best in newer and older, he combined and harmonized them in a body of sound scientific knowledge. That he did not place much on permanent record in the literature of the subject in which he was so well skilled, was a loss to all his contemporaries. But he was always ready to impart to his professional brethren the results and teachings of his experience. In pathology his interest was lively; he was shrewd and accurate in diagnosis, quick and skilful to devise and apply remedial measures.

Similar high qualities of mind were evinced also by Dr. Parsey in his administrative functions. The long and successful management of the large asylum in which he passed most of his professional life is evidence of this. And what was true here of the general was true of the particular also; for in dealing with details he was ever of ready resource, skilful in adaptation, judicious in selection.

With his patients, his relations were of a cordial nature, his kindness and goodness of heart conspicuous; and great were his forbearance and tact in dealing with many difficult cases, and never-wearying his thoughtfulness and assiduity in making provision for their better interests and care and cure.

To those who worked under him in any capacity he showed a generous kindness and benevolence of disposition, mingled with a firmness, which made his rule at once successful and agreeable. A considerate or indulgent bearing towards the various members of the staff, however, never relaxed into looseness of control, or permitted of carelessness in duty.

He will long live in the memories and affections of all those who were privileged to know him. His friendships were intimate and cordial. They who knew him best loved him best.

This is scarcely the place to dwell upon his family relations. Yet it is permissible to say how loving and tender were the ties that bound him, in life, to the wife, the daughter, and the son, now left to deplore his loss.

W. J. M.

DR. THOMAS S. KIRKBRIDE.

The long and honourable career of this distinguished mental physician—an Honorary Member of our Association—has at last been brought to a close, and, appropriately, on the spot where he has so long laboured.

> The proper place for man to die
> Is where man works for man.

It is melancholy to think that we shall no more receive the familiar Annual Report which, with such undeviating regularity made its appearance year after year. These reports were a true reflex of the unceasing care, the unflagging zeal, and the stern devotion to duty which for nearly forty-four years marked the cha-

racter of "the man at the helm." Never were superintendent and asylum more completely one. It was impossible to think of the Pennsylvania Hospital for the Insane without thinking of Dr. Kirkbride; it was equally impossible to think of Dr. Kirkbride without thinking of the Pennsylvania Hospital.

Several years ago when in our American Retrospect we referred to one of Dr. Kirkbride's Reports in which he suggested the propriety of a statue being erected to Dr. Franklin in the grounds of the Asylum, we ventured to express a hope that another would be erected to mark the Committee's appreciation of the prolonged and faithful services of the Superintendent himself. Since his death we have observed the suggestion made that statues should be erected to the memory of both Kirkbride and Ray in Philadelphia. To this proposition we cordially respond, and we should hope that those who in other lands appreciate unselfish worth and a life-long devotion to humanity, will be allowed to unite in this public tribute to two great and good men, intimate friends during life, and not long separated by death.

We have been favoured with the following sketch of Dr. Kirkbride's life, written mainly by Dr. Curwen, of the Warren Asylum, Pennsylvania:—

Dr. Thomas S. Kirkbride, Physician-in-Chief and Superintendent of the Pennsylvania Hospital for the Insane, died on Sunday night, December 16th, after a protracted illness, at his residence, within the grounds of the Institution which, for over forty years, he had faithfully served.

Dr. Kirkbride's habitually vigorous health sustained a severe shock four years ago in a prolonged illness, from the effects of which he only partially recovered. About two years ago he had a second illness, from which again he rallied, and last winter he was able to resume a considerable portion of his ordinary duties. In the spring he was again, however, prostrated, and never rallied to any hopeful extent. During the last few weeks there have been periods of temporary improvement, and he has even been able to drive in the Hospital grounds. On December 14th he had a severe chill, and gradually relapsed into coma, from which he never rallied.

Dr. Kirkbride was born on July 31, 1809, near Morrisville, Bucks County, Pennsylvania. His ancestor, Joseph Kirkbride, came to this country from the parish of Kirkbride, County of Cumberland, England, with William Penn, being connected with the Society of Friends, as have been his descendants down to the present generation. He received his academical education at Trenton, N.J., and graduated from the Medical Department of the University of Pennsylvania in March, 1832, the subject of his thesis being "Neuralgia." In the following April he was appointed resident physician to the Friends' Asylum for the Insane, in which position he served for one year, when, in March, 1833, he was elected resident physician to the Pennsylvania Hospital, where he remained two years, after which, settling in Philadelphia, he engaged in private practice, devoting himself principally to surgery, and at this time he was physician to the House of Refuge, the Institution for the Blind, and the Magdalen Asylum.

In October, 1840, without solicitation on his part, Dr. Kirkbride was elected Physician-in-Chief and Superintendent of the Pennsylvania Hospital for the Insane, a new institution on the west side of the Schuylkill River, then nearly completed, and to which it was intended to remove the insane from the old hospital at Eighth and Pine Streets. The new hospital was opened on the 1st day of January, 1841, since which time he has had the care and management of it. By constant improvements and additions to the original building, this institution, which was then only capable of receiving a hundred inmates, now accommodates upwards of five hundred. In 1854, the original building having become crowded, Dr. Kirkbride recommended the erection of a new one on the grounds of the institution, which comprised a tract of one hundred and thirteen acres, and he urged the complete separation of the sexes as if in two distinct institutions. He further recommended that the building proposed should be erected through an appeal to the public, which, accordingly, was

made, and with entire success, the building being completed wholly with private contributions, exceeding in the aggregate $355,000. This new building was a third of a mile distant from the other. It was erected in accordance with his own carefully-prepared plans, and is so admirably adapted to the purposes for which it was intended, that it has been a model for similar buildings which have been subsequently erected. The new building was opened in October, 1859, and since that time the Pennsylvania Hospital for the Insane has consisted of two separate departments—one for men and one for women—each having a capacity for two hundred and fifty patients, and entirely distinct from each other in all their arrangements, though with the same physician-in-chief and the same Board of managers. The success of this experiment, which he inaugurated, has been complete, and has led to the adoption of the plan in other institutions.

As an authority in mental disease, Dr. Kirkbride enjoyed the highest reputation, and his name was so identified with the great institution of which he was the physician-in-chief, that "Kirkbride's" has become in this country the popularly-used synonym of the English "Bedlam." He was a careful student, and possessed marked executive ability. His faithful devotion to the interests of the institution confided to his care has frequently elicited the admiration of its managers.

Dr. Kirkbride was of square build and medium height, with a firm mouth, penetrating eye, and a charmingly benevolent face, which was expressive of his great modesty, spotless integrity, and rare virtue. He was endowed with a wonderful tact in the management of the insane, and he was able quickly to win the affections of even his most wayward patients, and his forbearing gentleness and wise firmness enabled him to exert the best influences upon all who came under his care.

His writings have given him a high reputation. His "Propositions Relative to the Construction of Hospitals for the Insane," first adopted by the Association of Medical Superintendents of American Institutions for the Insane, has been repeatedly re-affirmed by them, and were published in 1854, with notes and additions, under the title of "The Construction, Organization, and General Arrangement of Hospitals for the Insane," of which a second edition was called for in 1880. In his annual reports Dr. Kirkbride, year by year, discussed at length nearly every subject connected with the treatment and care of the insane, and they constitute a series of great value to the student of mental diseases.

No man in the United States has devoted himself more entirely to the care of the insane than Dr. Kirkbride. From the day of his appointment to the superintendency of the Pennsylvania Hospital for the Insane, his whole thought was given to whatever would tend to relieve the mental disorder of those placed in his care, and everything which could in any way assist in that work was laid under tribute from the firm belief he entertained that nothing should be overlooked, for a reason clear to everyone, that small things often have a great influence in turning the current of thought and diverting to happier or more gloomy thoughts, as the incident may itself determine. No one can read the very able, conscientious, and practical reports which have emanated from him during more than forty years without being fully convinced that his whole energy was given to his work; and the results of that work are shown in those reports, and in his work on the "Construction of Hospitals for the Insane," which places the reader in possession of practical conclusions and sound deductions from long experience which can be relied on, while the shifting sands of theory are blown away.

The wonderful changes which have been effected in the last forty years in the treatment of the insane in America may, in great part, be attributed to his labours and his influence on his brethren connected with the different institutions. The amount of restraint used at that early date was greater than even

those who write so much on the subject know, and Dr. Kirkbride's efforts to change that condition of things were earnest and persistent, and while not a believer in absolute non-restraint, he yet held firmly to the opinion, as he did to all that he had formed cautiously and deliberately, that restraint should be used only when the condition of the case, and the benefit of his fellow-patients, really demanded it, or, in other words, on the same principle that a surgeon would apply a splint to a broken limb; and the truth was strongly expressed by Dr. Bucknill, of England, that while Dr. Kirkbride believed in restraint, he rarely used it.

Dr. Kirkbride was one of the founders of "The Association of Medical Superintendents of American Institutions for the Insane," and for eight consecutive years was its President. He was also a Fellow of the College of Physicians of Philadelphia, an Honorary Member of the British Medico-Psychological Association, and a member of the American Philosophical Society.

Correspondence.

To the Editors of THE JOURNAL OF MENTAL SCIENCE.

GENTLEMEN,—In Prof. Cleland's rejoinder to my reply, which appeared in the last number of the Journal, he refers the reader to his paper in the July number, and to his previous memoir which it supplements; and he goes on to say that he "suspects that those who pursue this course will have a great advantage over Dr. Mercier." I do not for a moment impute to Dr. Cleland any intentional discourtesy, but the passage I have quoted might mislead a hasty reader into the belief that Dr. Cleland accuses me of the dishonourable course of criticising a paper that I have never read. Against such an interpretation of this passage I am bound to protect myself. My reply concerned only Dr. Cleland's paper in the July number of this Journal; it was not intended as, nor did it pretend to be, an answer to any other paper. As his article was written, as he avows, with the intention of explaining "more fully" his views on the relations of the nervous system to the operations of consciousness, I was under no obligation to go back to his previous utterances. As a matter of fact, I tried to procure a copy of the paper which he read before the British Association in 1870, but as it was not published in the "Report of the Association," I was unable to do so. Had I read that paper, however, I should certainly not have thought it fair to nail a writer to opinions expressed by him thirteen years before. That I read the article to which I did reply, and read it pretty carefully, is, I think, apparent not only from the detailed nature of my reply, but from the fact that in nine pages I have quoted Dr. Cleland's own words no less than twenty times. I feel sure that most of his readers will disagree with Dr. Cleland's opinion that no advantage to science would result from another contribution by him to the controversy; but as to this he is, perhaps, the best judge.

Will you allow me to make another explanation? Dr. Huggard, in his very interesting article on "Definitions of Insanity," quotes my definition as "a failure of the organisation to adjust itself to its environment," and proceeds to demolish it. This, however, is not my definition. I have defined insanity as "a failure of the process of adjustment of the organism to its environment," an expression which carries, to my mind, a meaning quite different from the one that Dr. Huggard ascribes to me. I should now substitute the term "disorder" for "failure."

Yours truly,

Feb. 15. CHAS. MERCIER.

DR. MERCIER'S DEFINITION OF INSANITY—A CORRECTION.

To the Editors of THE JOURNAL OF MENTAL SCIENCE.

GENTLEMEN,—I find that in my "Definitions of Insanity" in the last number of this Journal I have not given Dr. Mercier's definition precisely as he states it. Dr. Mercier's words are: "From whatever point of view it is regarded, insanity is then found to be a failure in the process of adjustment of the organism to its environment," whereas the definition I ascribed to him was that insanity is "a failure of the organism to adjust itself to its environment" ("Journal," Jan., 1882, p. 526). I need hardly say that the first form of words is, equally with the second, open to the objections I have pointed out. I may add, moreover, that it gives prominence to an element that renders the definition self-destructive. In the paragraph preceding the one I have quoted from, Dr. Mercier says: "To say that the organism is adjusted to the environment is to say that it is in definite relation with the environment, and for a relation between two terms to be definite it is necessary that the terms themselves between which the relation subsists should also be definite" (p. 525). Now, as "environment" is not a definite term, there can not (from Dr. Mercier's premises) be any definite relation between the organism and it, and therefore the organism cannot be adjusted to the environment. Dr. Mercier's only escape from this position would be to say that "environment" is a definite term. He has, however, himself cut off his retreat. He says: "Now, the definition of insanity is a failure in the *process* of adjustment, and the onus of failure lies in the process itself only when the terms are capable of adjustment. If the condition of the organism on the one hand, or the condition of the environment on the other, is such that they are either of them incapable of being definitely represented in consciousness, then the failure is in the representation of the terms in consciousness, and not in the process of adjustment of the one to the other" (*l. c.*). Dr. Mercier then gives examples where special portions of the environment were not definite. The addition of the remoter and more general portions would hardly increase the definiteness. We thus see that Dr. Mercier cannot consistently admit either that the organism is ever adjusted to the environment, or that the failure in adjustment is ever in the process.

Yours truly,

Sussex House, Hammersmith, WILLIAM R. HUGGARD.
March, 1.

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(To be continued.)

Appointments.

Deshon, F. P., M.R.C.S., appointed Medical Superintendent of the Metropolitan Lunatic Asylum, Kew, Victoria.

Godson, Edwin, M.R.C.S., appointed Medical Superintendent of the Hospital for the Insane, Paramatta, New South Wales.

Lee, G. T., M.R.C.S., L.S.A.Lond., appointed Assistant Surgeon at Fisherton House Asylum, Salisbury.

Mickle, Arthur Fflintoff, M.B., appointed Medical Superintendent of Haydock Lodge Asylum, *vice* James Shaw, M.D., resigned.

Richardson, William, M.B., C.M.Edin. (Senior Assistant at the Crichton Royal Institution, Dumfries), appointed Medical Superintendent of the Isle of Man General Lunatic Asylum, Douglas.

Sankey, H. R. O., M.B.Lond., appointed Medical Superintendent of the Warwick County Lunatic Asylum, Hatton, *vice* Dr. Parsey, deceased.

Scott, John Walter, M.R.C.S. and L.S.A., appointed to be Assistant Medical Officer at the Hants County Asylum, Fareham.

Sinclair, Eric, M.B., C.M.Glasg., appointed Medical Superintendent of the Hospital for the Insane, Gladesville, New South Wales.

NEW YORK MEDICO-LEGAL ASSOCIATION.

Among the Honorary Members recently elected are the names of Professor Ball and M. Motet, Paris; Dr. Ireland, Prestonpans, near Edinburgh; and Dr. Hack Tuke, London.

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PART 1.—ORIGINAL ARTICLES.

The Physical Conditions of Consciousness. By A. Herzen, Professor of Physiology, Lausanne. *Translated by* Dr. T. W. McDowall.

(*Concluded from p.* 53.)

IV.

Before approaching the next subject I wish to avoid the reproach of departing from the rules of the inductive method by drawing conclusions from the complex to the simple; that is to say, in this case, by applying to the lower centres a conclusion drawn from the observation of the higher centres, instead of proceeding in the opposite way. I am obliged to proceed in this manner by the very nature of the problem which really cannot be treated any other way. As we have to deal with the *subjectivity* of central phenomena it is impossible to seek its conditions when we have no direct means of proving its presence or absence. Now in respect to the subordinate centres we are reduced exclusively to objective observation, which in no way can teach us anything of the subjectivity of the changes which take place in them; therefore, whatever conjectures we may make in regard to the consciousness or unconsciousness of the motor reactions furnished by the lower centres, they can have only a certain degree of probability when we study these reactions by the aid of what subjective observation teaches us relative to the consciousness or unconsciousness of the cortical centres. It is because they have not followed this method that writers disagree so completely as to the presence or absence of subjectivity in the sensori-motor centres, and especially in the spinal cord. Let us begin with the latter.

Whereas some adopt the doctrine of Marshall Hall, ac-

cording to which the activity of the cord is essentially *different* from that of the brain, absolutely unconscious and purely mechanical, Maudsley and Lewes maintain, on the contrary, that the activity of all the nervous centres is essentially *identical;* but, as we know, with this radical difference, that according to Maudsley consciousness is in every case an accessory phenomenon generally absent; whereas, according to Lewes, it is a necessary phenomenon, constantly present. The facts under discussion are the following :—

If we place a drop of the acid on the skin of the lumbar region of a decapitated frog we immediately see the foot on the corresponding side lifted to scratch and rub the spot irritated by the acid; if we repeat the experiment after having amputated the foot, the application of the acid puts the frog into an evident state of agitation, it makes fruitless efforts with the stump, hesitates, stops, seems to reflect, and ends by employing the *other* foot to wipe off the acid. Pflüger was so struck by this phenomenon that he attributed not only consciousness but even intelligence and will to the medullary reflexes. These opinions were adopted by Auerbach in Germany and Lewes in England. But since 1858 Schiff expressed himself opposed to this interpretation. He has the merit of having recognised, on the one hand, that the facts observed in man in consequence of traumatic lesions of the cord *do not permit us to conclude the unconsciousness of the spinal cord.* For in these cases the nervous communication between the cord and brain being interrupted, the latter can in no way perceive what takes place in the cord: it is exactly as though these two organs belonged to two individuals—the brain of Paul does not know what occurs in the cord of Peter. On the other hand, the visible reactions being the only objective sign which reveals to us the presence of a conscious sensation in any organism, except our own, *we have no right to refuse all trace of consciousness to the spinal cord.* But whatever may be the degree of consciousness it possesses, we can by the following reasoning refuse the property of intention and will to the spinal reactions; in fact, we give this name to movements of which we have an anticipated representation, of which we foresee the form, the energy, the succession, and the effect; but the spinal cord of a decapitated animal cannot have these representations, because the destruction of every sensory

centre necessitates the abolition of the corresponding representations, and because decapitation is the simultaneous destruction of all these centres; the cord is therefore deprived of the psychical materials which, combined into a whole, confer on any given movement the special character which we indicate by the word voluntary. So true is this that we do not give this name to movements which, notwithstanding the integrity of the nervous centres, are accomplished in the absence of all this combination of representations, without prevision and without consciousness: we then call them automatic. I would further say: the examples of unconscious movements *accomplished by ourselves* seem to me the *only* facts favouring the possibility of any unconscious nervous reaction.

This reasoning is perfectly applicable to the sensori-motor centres; they are accessible to the multiplicity of impressions which the organism can receive from the external world by the organs of sense, and they consequently react by series or groups of movements to the series or groups of impressions which stimulate them. Thus, for example, a pigeon deprived of the hemispheres stands on the ground or perches on a stick, maintains its equilibrium when the stick is rotated, rises if placed on its back, flies if thrown into the air, and does not fall down after having flown, but perches on any object, and so on; in some favourable cases, it even ends by learning to eat and drink by itself; it then continues to live and behaves almost like a normal pigeon, the only difference being that it is more apathetic, that it manifests less initiativeness, that it seems to "want spontaneity," as A. Bain would say. Seeing that the analogy between sensori-motor and ideo-motor acts is much greater than that between the first and the spinal reactions, we may *a fortiori* conclude that the opinion is not maintainable according to which the activity of these centres is also unconscious.

Now what is the degree of consciousness which we can attribute to the spinal cord and to the sensori-motor ganglia? By *degree* I mean simultaneously the quantity and quality of consciousness, that is, its intensity and the psychical dignity of its contents.

On this subject accident has furnished me with information which I think important. During a certain period of my life I suffered from frequent syncope, and I had the opportunity of observing on myself the psychical phenomenology

of the return to consciousness. During syncope there is absolute psychical non-existence, total absence of all consciousness; then one begins to have a vague, unlimited, infinite feeling, a feeling of *existence in general* without any delimitation of one's own individuality, without the least trace of any distinction between the ego and the non-ego: one is then "an organic part of nature," having the consciousness of the fact of one's existence, but having none of the fact of his organic unity; one has, in a word, an *impersonal* consciousness. This feeling may be agreeable if the syncope is not due to violent pain, and very disagreeable if it is: this is the only possible distinction: one feels that he is living and enjoying or living and suffering, without knowing why he enjoys or suffers and without knowing the seat of this sentiment. A great number of facts make it probable that in this phase of return to consciousness, the extremities may execute the spinal reflexes in response to tactile or painful irritations; although the cephalic centres are certainly still incapable of becoming active. As a result of this first observation I believe that the spinal marrow, suddenly separated from the cephalic centres by decapitation, is reduced to this elementary form of sensation, without any discrimination, without localisation, without knowledge of the different parts of the ego, or the ego itself, and accompanied only by a vague, diffuse, impersonal consciousness. Such no doubt is the only form of consciousness which we can admit in the minute beings which are wanting in special organs; it is also the only one which savants unanimously attribute to the newly-born child, before he has had time to learn, by the education of his senses and the association of impressions, the topography of the surface of his body, and to distinguish its different parts from one another and from the objects which do not belong to it. I think, consequently, that the spinal cord of a decapitated animal would react to any impression *indifferently* by any movement, perhaps by a series of irregular contractions of all the muscles (as it really often does in the newly-born), if it did not contain a great number of direct communications from the afferent to the efferent nerves, communications previously developed during the infinitely long evolution of living beings and become hereditary, or else acquired by the individual himself; but in every case *preformed*, that is to say, ready to re-act immediately in a given manner to a given irritation. I believe that in relatively simple cases, those in which the

cord gives an immediate and limited reaction to a particular stimulus, by means of a preformed mechanism, the spinal consciousness is reduced to the minimum of intensity or to zero; because then the transmission of the stimulus is accomplished with the maximum of rapidity and facility by nervous paths perfectly adapted thereto; on the contrary, in relatively complicated cases, like that of the decapitated frog whose leg we amputate to oblige it to execute less automatic reactions, or like that of the tritons of Flourens whose posterior extremities, after total section of the cord, gradually *learned* to co-ordinate their irregular reaction with the movements of locomotion; in these cases, I say, the spinal consciousness attains its maximum of intensity, because in these cases the central elements offer a considerable resistance to the stimulus which, not finding a means of escape close at hand, radiates and produces an extended, profound and lasting disintegration up to the moment when it succeeds in making new paths duly adapted to the unusual circumstances; these paths once sufficiently elaborated, every act is accomplished more quickly, more easily, more automatically, less consciously.

But it must not be forgotten that we have always spoken of decapitated animals; in the normal animal it is not quite the same; if an excitation which affects the spinal cord is not immediately and *entirely* transmitted and discharged in the shape of automatic reaction, nothing obliges it to remain in the cord, and there to effect the adaptation of new central tracks; on the contrary, it passes directly to the cephalic centres; it thus follows that in the non-mutilated animal the spinal consciousness will *never* be called upon to manifest itself except in some exceptional cases, as that of animals who have no cephalic centres—the *amphioxus* for example. It is evident that in such animals the cord must accomplish all the functions devolving upon the nervous centres. But during the course of the evolution of living beings, the anterior portion of the cord undergoes an extraordinary development and becomes cephalic; the central attributes follow the same course; they gradually abandon the spinal centres which become more and more subordinate, and end by being only organs of transmission and of some definitely organised reflex acts: the central attributes gradually become the more and more exclusive privilege of the new cephalic organs which alone exhibit a complexity and specialisation of structure capable of corresponding to the more and more varied neces-

sities of a more and more complicated organism. It follows that the spinal consciousness must be more intense in the inferior vertebrates and less intense in the superior: it must be at its maximum in the amphioxus and its minimum in man.

Let us now proceed to the sensori-motor centres at the base of the brain. I have already said that the observation of animals deprived of their cerebral lobes leads us, in the majority of cases, to the conclusion that the movements which they execute apparently without intelligence and without will, are yet not unconscious; on the contrary, analogy, and especially the arguments which we have quoted in support of spinal consciousness, oblige us to consider them as habitually conscious reactions. Maudsley himself, so inclined to deny consciousness wherever it is possible to deny it, and so disposed to consider animals as unconscious machines, is obliged to recognize, notwithstanding some contradictions to which I will refer later on, that in regard at least to the superior vertebrates the sensori-motor centres enjoy a certain degree of consciousness:—

> "For it may well be that organs which are only a little lower in dignity than the supreme cerebral centres, which are essential to the development of their function, and which are in such intimate functional relation with them throughout life that a functional separation appears to be a pure abstraction, do possess that property which is most highly, but not exclusively, developed in the higher centres"—("Physiology of Mind," p. 242).

For the same reason he grants them, though unwillingly, what he calls *a kind of sensory perception*, which he considers the germ or rudiment of *intellectual* perception, the exclusive privilege of the cortical centres. So it is no longer the *fact of consciousness* which is placed in doubt; we have to deal with a more subtile distinction, relative to the *quality* of the contents of consciousness. Let us see if the study of the further progress of return to consciousness after syncope permits us to determine this quality.

From the chaos of the first phase which is characterised, as you remember, by a confused, impersonal consciousness, without any trace of localisation, without discrimination of definite sensations, vague and obscure differences gradually take shape; one begins to see and hear; but, what is very curious, the sounds and colours seem to arise within one's self, without one having the least idea of their external origin;

further, there is no connection between the different sounds and the different colours; each of these sensations is felt by itself; thence results an inexpressible confusion, accompanied by a complete stupefaction of the individual; at this moment the sensory centres have regained sensibility, but they are so only to the impressions which come *directly from the exterior*, each centre for itself. The intercentral reflex action is not yet re-established, the different sensations do not combine with one another; there thus results the total want of localisation, of distinction between the ego and the non-ego, and of projection beyond the origin of the impressions; one has *stupid* sensations, if I may express myself so, that is to say, sensations which, because they remain isolated, cannot be *known*, but only *felt*. Next follows the re-establishment of the intercentral reflexes; their activity fuses into what we call the sensorium commune; the different sensations begin to influence one another, and, consequently, to become reciprocally determinate, defined and localised; and there results the distinct appearance of the consciousness of *the unity* of the ego; but this consciousness is at first only an unintelligent feeling, which merely expresses the fact of the organic unity of the subject, and from which a clear notion of the relation of himself to his surroundings is still entirely absent. In this stage of awaking I clearly felt (p. 181-2) *I was myself*, and that my auditory and visual sensations came from objects which did not form a part of myself; but I did not understand what was happening, nor what had happened, why I was there, stretched on the ground or on a sofa, nor why the persons present surrounded me eagerly, unbuttoned my shirt, threw cold water on my face; that was because these are complex perceptions of a higher order, genuine intellectual perceptions resulting from the synergic action of the cortical centres; they can only, therefore, reappear with the complete re-establishment of these centres, which are the first to suffer and the last to recover their functional integrity. Later on, at a given moment, at the end of a variable but always appreciable interval, filled by the strange stupor already described, the cortical centres are suddenly re-established, their nutrition having resumed its normal course; at the same moment the mind is traversed, like a flash of lightning, by the following thought: "Ah, that was another fainting fit." From this moment intelligence is completely re-established, it seizes the complicated relations of the situation, and resumes the command which

a temporary insufficiency of cerebral nutrition had deprived it of.

Now, what conclusions can we draw from these observations? In the first place it seems evident that the sensory centres, taken individually, can be conscious each in its particular mode of sensation, but only, as I have said, in a stupid manner, that is to say, without combination or correlation between the different sensations, consequently without their localisation—without projection of their origin beyond the ego—and, consequently, finally, without distinction between the ego and the non-ego. In the second place, it is evident that the sensory centres, combined in the *sensorium commune* (if not anatomically, at least functionally, as the mechanism of inter-central reflex action, of the synthesis of the different specific sensations of external origin, and of the internal induction of reflex sensations producing each other) may be conscious in an elementarily rational manner. Not only can they feel, but they can know that what feels is not what produces sensation; they can consequently have individual consciousness in its most elementary form, *i.e.*, as a mere sentiment of the unity of the ego, but cannot form a notion of the relations of this ego with what surrounds it, nor understand the circumstances in which it finds itself.

We see in all this a great analogy to what occurs in the spinal cord of a decapitated animal; very probably, in an animal deprived only of the cerebral hemispheres, the sensori-motor centres can at first accomplish only the acts, however complex they may seem to us, which are due to a preformed mechanism, hereditary or acquired; their reactions would consequently, in the majority of cases, be automatic, and slightly or not at all conscious. Just as the spinal cord in certain favourable cases, for example in the salamanders of Flourens, may learn to execute reactions which at first were impossible, so the sensori-motor centres learn in certain cases (to tell the truth, very rare ones, for example in the pigeons deprived of their hemispheres) to execute all the co-ordinate movements necessary for the maintenance of the life of the individual; and we cannot doubt that during the period of learning, their consciousness must be carried to the maximum intensity of which it is capable, to diminish afterwards gradually and in proportion as the new associations, by repetition and habit, adapt the nervous paths and render the intercentral transmission rapid and easy.

On reflection you will see that I do not make an improper use of the word *learn;* it suffices, in fact, to recall the perfect analogy which exists between the genesis of a motor association and that of an association of ideas. In both cases we have to do with intercentral reflexes in process of organisation. Once organised they constitute a faculty; this faculty, by habit, may at last act unconsciously. The process is identical in both cases. Maudsley is quite right in insisting on this analogy; he draws the following parallel between the acquisition of a series or group of co-ordinate movements, and the acquisition of a series or group of reflex cortical sensations—that is to say, of ideas; ideas, like co-ordinate movements, are the "constitutional" result of the surroundings, exercise, education. The ideas of a child are, like his movements, instantaneous, undecided, transient, disorderly. Ideas, like movements, are combined in groups or series the more indissoluble the oftener they are exercised; once combined, they are not produced separately without difficulty, and indeed generally become absolutely inseparable. Ideas, like movements, become more and more easily evoked by exercise, and end by appearing unconsciously. Finally, ideas by being repeated several times running, fatigue the organs concerned in their production, exactly as too prolonged movements fatigue the muscles. The sensori-motor centres being capable of perfecting their motor reactions, should be capable also of perfecting their rudimentary intelligence; but it is probable that, as in the spinal cord, this intelligence, as well as the consciousness itself of the *sensorium commune*, is very rarely called upon to act in the normal animal, as, whenever all the energy of any stimulus is not immediately and automatically restored entirely to the external world in the form of muscular movement, it does not stop in the subordinate centres to force new paths, but goes directly to the cortex. This preponderance of the cortical centres corresponds with the zoological position of the animal, and, as it increases, those exceptional cases for which there exists no mechanism ready to act immediately, and which demand reflection, pass more and more to the exclusive domain of the cortical centres. It follows that Consciousness, Intelligence, and Will abandon more and more the subordinate centres, and concentrate themselves in the superior ones; consequently the activity of the sensori-motor centres has its maximum of Consciousness, Intelligence, and Will in the inferior vertebrates, or in the animals entirely,

or almost entirely, deprived of cerebral hemispheres, and these faculties are, contrary to Maudsley's opinion, reduced to their minimum in the superior vertebrates, especially in man.

It is easily seen that the relation between consciousness and the functional disintegration of the nervous elements such as I have already indicated, holds good for the sensori-motor centres as well as for the cortical centres and the spinal cord. By neglecting this relation the clearest minds inevitably fall into contradiction.

We have seen that Maudsley considers the sensory centres as organs of a dignity almost equal to that of the cortical centres; elsewhere he says that the fact of animals artificially deprived of their hemispheres crying when irritated, does not prove that these animals *feel pain,* but only that *they cry as if they felt it.* To this I answer that Maudsley's reasoning proves still less that these animals *do not feel* pain, for cries, or any other external expression, are the only objective signs which reveal to us pain or any other internal sensation in any organism except our own; so that in all probability they indicate consciousness and not unconsciousness. We might as well doubt, in fact, that an animal in full possession of its hemispheres feels when it cries. In this case, as in the other, we have in favour of sensation only analogy. We might even doubt the consciousness of a man who says that he has a sensation, for, strictly speaking, each of us can decide the question only for himself, and can by no means have a *proof* that another individual feels anything. We can simply state that he *acts as though he feels,* and then remember that if we ourselves acted thus, we should do it in consequence of such and such sensations, and should finally conclude that probably the other individual had similar sensations. Still the analogy of one man to another is such that on this subject we have not the shadow of a doubt. Certainty diminishes, it is true, according as the organism is different from our own; it further diminishes if this organism is placed in abnormal conditions which permit it no longer to manifest all the reactions which it would manifest if it were not mutilated; but as long as there is any reaction, however imperfect or partial, we never can say with certainty that *nothing has been felt.* On the contrary, the only proof we have that any reflex reactions may occur unconsciously is furnished, I repeat, by subjective observation, which teaches *each of us individually* that certain reactions sometimes occur unconsciously in us.

Further on, Maudsley questions if we ever have consciousness of a sensation unless it awakens a perception.

"It is doubtful whether we ever are conscious of a sensation without perceiving, whether, in fact, we can have consciousness of a pure sensation; when we say we feel it, we feel it in a particular part of the body; and what is that but to perform internally a sensori-motor act, and to recognise more or less clearly its *where*—in other words, to *perceive* it according to forms of space?"—("Physiology of Mind," p. 242).

So be it, but when we feel *without* saying it, without knowing that it is *we* who feel, nor what we feel, as happens in the second stage of awaking from syncope, have we not simple sensations with absence of all judgment? Besides, Maudsley himself destroys this argument by admitting, on the one hand, that a new-born child has sensations, although he does not localise them, and cannot do so, as everybody agrees, until after the lapse of some time; and, on the other hand, that the confused sensations which accompany the various organic activities are *felt*, although they do not produce *clear* consciousness in us, or a perception of the causes from which they originate.

"In respect of our organic feeling, we are, in reality, on a level with those humble animals that have a general sensibility without any organs for special discrimination and comparison; and if this were the only feeling which an individual had, he would probably not know that he was an *ego*"—("Physiology of Mind," p. 254).

This is certainly incontestable, and I have tried to show that this is really so in the first stage of awaking from syncope; but because the *notion of the ego* is then impossible it by no means follows that *impersonal* consciousness does not exist; Maudsley seems here to confound consciousness *of the ego* with consciousness *in general.* It is with the latter that we have to do at this moment, and we have seen that we cannot exclude its existence even in the spinal cord; still more must we admit it in the sensory centres, but in these centres it is no longer *quite indistinct* as in the spinal cord, which has no special organs for discrimination and comparison; it is differentiated, for to each sensory ganglion there corresponds a particular quality of sensation, a *specific* sensation. Further, owing to their mutual reflex relations these ganglia, functionally united in the "sensorium commune," possess all they require for *comparison and discrimination,* that is to say, not only for *unintelligent* and undetermined sensation, but for *elementary perception,* for a

rudiment of intelligence, a first distinction between the ego and the non-ego, sufficient to establish at least the sentiment of the unity of the ego, in opposition to the plurality of external objects. Elsewhere Maudsley observes that, from the presence of a rudimentary intelligence in the sensory ganglia of inferior animals, we must by no means conclude that it is present in the sensory ganglia of man.

"On the contrary, it might be argued that as higher nervous centres are differentiated in the course of evolution, functions are localized in them which were more generally diffused in the lower animals; not otherwise than as the fore-limbs in man, which in the ape and some other animals serve both for grasping and walking, are specialized in structure and function as prehensile organs" (p. 24).

There is no doubt of this, and withdrawal of attributes and localisation of functions most certainly occur during the progress of evolution; indeed, evolution consists in this, and for this reason the higher an animal is placed in the zoological scale, and the more its cerebral hemispheres are developed, the less can we observe conscious psychical functions in its sensory centres; sensori-motor acts are in fact to a great extent automatic; we call them *instinctive.* For the same reason, in Man, consciousness and intelligence of the sensory centres are doubtless reduced to the minimum, exactly like those of the spinal cord; consciousness and, consequently, intelligence manifest themselves in those parts of the nervous system where there is still something to be done, which are not yet perfected mechanisms, and whose automatism leaves something to be desired; for they are, as we know, the subjective expression of one of the phases of the work of acquisition and organisation. Now to admit that consciousness has completely abandoned these centres, and has become the exclusive attribute of the cortical centres, we must first allow that all possible and imaginable sensori-motor acts are accomplished by means of a preformed mechanism, almost like the direct and immediate spinal reactions in the superior animals; but if it is probable that the spinal cord of these animals, through reacting in a uniform manner to uniform impressions, has arrived at the highest degree of unconscious mechanism, this is not at all probable for the sensory centres which are exposed to an infinite variety of impressions, not only from all the external influences likely to call into action the different forms of sensibility, but also from the inexhaustible stream of internal influences, acting upon

each from all the others, and all being acted upon by the cerebral hemispheres. So that, except the few automatic acts which they accomplish in virtue of an organisation definitely acquired by the species or by the individual, they are every moment obliged to provide new adaptations, that is to say, to do what the hemispheres do, though doubtless in a much more restricted manner. It follows that if in the superior animals the spinal cord, in which reflex sensation does not exist, has been reduced by the preponderance of the cephalic centres to an unconscious and automatic organ, and especially to an organ of transmission, the sensory ganglia are not so easily deprived of their attributes as independent and conscious centres, for they are the seat of *reflex sensation,* through which the simple organic sensibility is transformed into genuine mental activity, or *psychicity;* so that it is incorrect to say, as Maudsley does, that there is *no demarcation* between the reflex actions of the cord and those of the sensori-motor centres; on the contrary, there is a *very marked* difference between them—a difference which does not exist between the reactions of the sensory centres and those of the hemispheres; in fact, in the first case, the transition is abrupt, whereas in the second it is gradual; in the first we pass from a *simple* to a *complex* mode of activity; in the second we only pass from a *complex* to a *more complex;* and the complication which appears in the sensory centres, *reflex sensation,* is really the rudimentary germ of intelligence, which may be thus defined: an increasing complexity of reflex cortical sensations produced under the influence of external impressions; so that the transition in this case does not imply any new mode of activity, and is accomplished without any appreciable line of demarcation between the less and the more complicated; which justifies this other assertion of Maudsley, that a separation between the sensory and cortical centres must appear as a pure abstraction.

The result of this paper may be summarised as follows:—

I. *In the spinal cord:* Elementary, impersonal, unintelligent consciousness; maximum in inferior animals, minimum in superior; in the latter in their normal state spinal consciousness is never called for, because all the reactions which are within the capacity of the cord are accomplished automatically, and because the stimuli, not finding in the cord any mechanism capable of discharging them, are directly transmitted to the cephalic centres. It is only in cases of experimental complications of conditions that this conscious-

ness is awakened through the extended and profound disintegration which such complications produce ; it disappears again according as new mechanisms are organised and consolidated.

II. *In the sensori-motor centres* (functionally co-operating as "sensorium et motorium communia") : Individual consciousness, rudimentary perception, germ of intelligence; intelligent and voluntary character of the reactions submitted to conditions identical with those governing the intensity of the spinal consciousness, but with this difference, that owing to the infinite variety of external and internal impressions which excite these centres to activity, the latter is not reduced to a completely automatic mechanism like the spinal cord, and consequently always participates more or less in the panæsthesia of the individual by contributing thereto its share of consciousness.

III. *In the cortical centres* (acting as "intellectorium commune") : Intelligent consciousness, clear notion of the relations of the individual to external objects, and of these objects to one another, whence results the intentional, really voluntary character of the reactions. Conduct is regulated by past, present, and future circumstances, such as the individual can foresee by means of the experience he has acquired ; differing from the two former modes of consciousness, this one increases with the zoological status of the animal, and reaches its maximum in man. The intensity of this consciousness and the quality of its contents depend on the same conditions as those which regulate the consciousness of the sensori-motor and spinal centres.

IV. Lastly, *in the whole nervous system*, considered as the organ of the fundamental function of the whole life of relation, of *reflex action*—consciousness or unconsciousness of its activity, according to the physiological phase of this activity and according to the following law:—Consciousness is exclusively connected with the functional disintegration of the central nervous elements ; its intensity is in direct proportion to this disintegration, and simultaneously in an inverse proportion to the facility with which each of its elements transmits to others the disintegration which affects it, and with which it returns to the phase of reintegration.

V.

I may be wrong, but it seems to me that this explanation, however incomplete it may be, proves that the physical law of consciousness which I propose is justified by facts, and

applies equally to the action of the different nervous centres. Far be the thought from me that my law is a perfect and complete expression of the true state of things, but it seems to me that it is a better and more complete expression than any hitherto offered, for it embraces at the same time the most intensely-conscious and the most unconsciously-automatic activity. Besides, it forms a bond between the apparently irreconcilable opinions of Lewes and Maudsley, and this not by adopting the *juste milieu*, but by amalgamating the extremes in a conciliatory synthesis. Let us return for a moment to the opposition between these two eminent psychologists. Neither maintains an absolutely false thesis, but each exaggerates what there is of truth in the thesis which he maintains: Lewes, too much pre-occupied by the phase of cerebro-psychical disintegration, by the resistance of the central elements and by the difficulty of transmission, sees consciousness everywhere; Maudsley, too much pre-occupied by the cerebro-psychical reintegration, by the rapid action of the preformed mechanisms and by the facility of transmission, sees it nowhere. It follows that Maudsley thinks himself justified in enunciating this paradox: that man would not be a less perfect intellectual machine without consciousness than with it, and that Lewes is indignant at such an assertion:—

"To suppose that they pass from the psychical to the physical by frequent repetition would lead to the monstrous conclusion that when a real naturalist has, by laborious study, become so far acquainted with the specific marks of an animal or plant that he can recognise at a glance a particular species, or recognize from a single character the nature of the rest, the rapidity and certainty of this judgment proves it to be a mechanical, not a mental act. The intuition with which a mathematician sees the solution of a problem would then be a mechanical process, while the slow and bungling hesitation of the tyro in presence of the same problem would be a mental process: the perfection of the organism would thus result in its degradation to the level of a machine"—("The Physical Basis of Mind," p. 379, 1877).

I confess that in this I see no more a subject for indignation than in the fact that a musician, who has painfully learned the varied and delicate movements which he must execute, with a lively consciousness of each one during the period of learning, ends by playing the most difficult pieces without his movements, the mechanism of which is definitely organised, occupying his consciousness for a single moment; this is a necessary consequence of his progress and his "virtuosity," and without it he could never enjoy

music nor afford pleasure to others by it. The same must hold good in relation to intellectual activity, and does so; in fact, *the conscious mental process betrays an imperfection of the cerebral organisation*, for it indicates, as Herbert Spencer has so well understood and expressed, the presence of a new, unusual activity, which deranges the equilibrium of the innate or previously-acquired automatism, and which does not find a preformed mechanism ready to discharge it. Active vibrations occur unconsciously until the moment when they meet central elements which resist their transmission, and then they become conscious; but if the same activity is repeated several times, if the resisting elements learn to transmit it without delay to other elements, the limit between the conscious and unconscious will *ipso facto* be displaced, thrown back: the conscious proceeds from the unconscious and returns to it; but consciousness does not thereby cease, it only goes elsewhere, and continues; as combinations of an inferior order escape from consciousness, combinations of a superior order occupy it. The reduction of the simpler psychical processes to automatism is the absolute condition of the mental development which would otherwise be impossible; a naturalist would never recognise a plant or an animal at the first glance, if he were obliged each time to have a vivid consciousness of each separate characteristic; the mathematician would not even conceive of the existence of the highest problems if he were obliged each time to have a clear consciousness of the multiplication table. It is thus with all our psychical acts. It follows, therefore, that the conscious mental process is the transitory phase of an inferior to a superior cerebral organisation; it expresses novelty, incertitude, hesitation, groping, astonishment, an imperfect association, an incomplete organisation, a want of promptitude and exactness in transmission, a loss of time in the production of reaction; it indicates that the nervous paths are not sufficiently cleared or distinctly enough traced to permit the stimulus to be transmitted without obstruction, whatever may be the final effect, reflex movements or reflex ideational sensations. It shows in short that physiology has not yet become morphology, and as soon as it does so it disappears. *But it does not disappear completely and absolutely*, it only disappears where the work of incarnation is finished, to proceed to some other region where this work has just begun; *for consciousness always and necessarily accompanies the clearing of the cerebral field, whilst it ignores the*

rest unless there is some new combination to be formed. This is what has escaped Lewes and Maudsley, when the latter supposes that a man may be as good an intellectual machine without consciousness as with it, and when the former is indignant at the idea that the perfecting of the organ coincides with its degradation to the level of a machine. The reduction of the whole psychical activity to an unconscious automatism would be possible only if organic evolution had an unsurpassable limit, if all labour required to reach this limit had been completed, if nature had exhausted its resources and could no longer advance. But all our knowledge of the evolution of living beings tells us, on the contrary, that it has no limit. This is why the unconscious intellectual machine of Maudsley is just as impossible as Lewes's indignation is useless; for if the psychical processes which now are conscious become automatic to-morrow, far from losing all consciousness thereby, we should have a consciousness more vivid than ever, but its *contents* would be different; it would not abandon the psychical acts which it now accompanies and which seem to us very complex, until they had become simple to us, and in order to accompany more complex acts, more abstract ideations, acquisitions of a higher order. It would then accompany the formation of new intercentral communications in the cortical layers, the appearance of new layers on the convolutions, the elaboration of new convolutions in the hemispheres and perhaps the development of new cerebral organs. The race would then do what the individual now does, what in fact it has always done, but in another sphere of functions. The school-boy is conscious of the separate cyphers or the elementary operations which he must perform, but he has no idea of the higher mathematical problems; the student is no longer conscious of these elementary operations, they are accomplished instantaneously and automatically in his mind, but he is conscious of the more complex calculations and problems of arithmetic and algebra, which he is studying. He is ignorant, however, of the existence of the problems of higher mathematics, these are sealed books to him. Finally the mathematician executes, in the twinkling of an eye, unconsciously, the most complex calculations, manipulates formulæ as the pianist the keys of an instrument, and his consciousness is awakened only by the most difficult problems of higher mathematics; and according as the latter become familiar, habitual to him, according as he comprehends

them easily and solves them rapidly, they occupy his consciousness less and less. It gradually abandons them, proceeding to their results, their consequences, their applications, to new combinations, to unknown questions—in other words, it manifests itself more and more *elsewhere*, where cerebro-psychical evolution trenches upon uncultivated regions, and the work of clearing begins, and there stakes out the roads of the future. It is conditional upon abandoning the simple, the acquired, that consciousness rises to the complex and goes forth to conquer the unknown.

Such is the cerebral or intellectual progress which has done so much in the past and which will do still more in the future, and which has no limits other than the evolutional plasticity possessed by a race or individual. Progress towards perfection necessarily stops when the conditions of further development no longer exist, but it necessarily continues where these conditions are found united. This is why, on the one hand, the animals considered as *inferior* by us, remain where they are; they have traversed the whole extent of the development compatible with their particular organisation, and the more simple the organo-psychical correspondence which they represent is, the more unintelligent and unconscious, *i.e.*, the more instinctive and automatic they are. This is why, on the other hand, of all the animals we call *superior*, man has been able to develope in such a surprising manner, that he has come to believe that he has nothing in common with them, and has thought himself justified in denying their relationship; they have exhausted the possibilities offered by their poorer organisation and are henceforth condemned to revolve in the circle of a more or less complete automatism, which he alone has been able to break and enlarge. And he has enlarged it so much that he has opened to himself an infinite horizon of new acquisitions more and more complex, where his conscious activity may exercise itself during endless periods without the risk of being reduced to a state of an intellectual automaton. Two conditions, however, might put an end to the proud *excelsior* of the human species; psychical progress must of necessity stop some day, either through an absolute boundary between the knowable and the unknowable, or through an equally absolute limit to the organic perfectibility of the human brain. In these two cases consciousness will, without doubt, finish by abandoning more and more the cerebral activity, which will gradually assume an instinctive, reflex, auto-

matic, mechanical character. Notwithstanding the increasingly intense, forced, giddy and feverish work to which our race addicts itself, it is certain that long before this limit will be reached, the gradual cooling of our solar system will have put an end to the possibility of life on the surface of the globe. This prospect is not encouraging to the race, but it is not the less certain; to tell the truth, it affects us very little as individuals.

Shall we therefore say, *Après nous le déluge?* No, we will rather say, *Fais ce que dois, advienne que pourra!*

On Escapes, Liberty, Happiness, and "Unlocked Doors," as they affect Patients in Asylums. By J. A. Campbell, M.D., F.R.S.E.

During the year ending 1883, I had rather an unusual number of escapes, and as two ended fatally from exposure, I thought it only fitting to glance over the escape-book and see the results of previous years. I may here mention that the two patients who died were dements, that one had been 17 years in Garland's Asylum, the other 15, that neither had shown a disposition to escape previously, that one died after two days' exposure, he having been found alive, and that the body of the other was found seven days after his escape; also that all means likely to be of avail in retaking these patients were made use of.

As I take it, our duty as medical officers of asylums stands in the following relations:—1st. To preserve, and to do all we can to lengthen the lives of our patients. 2nd. To promote recovery by all reasonable and legal means. 3rd. To do this in the most pleasant manner for our patients, and with the greatest regard for their comfort and happiness.

I am thoroughly aware that different opinions are held about the gravity or triviality of escapes. I have heard the views expressed that a good lot of escapes show a healthy state of an asylum, and that some people take too serious views about the loss of a patient by his own act or accident after his escape from the asylum. I think we must look at this from the point of view of the individual patient. We cannot afford, it is against the first tenets of our profession, to follow the example of nature in sacrificing the individual for the best interests of the race. We must not, we should not,

we dare not, get rid of or allow the suicidally or dangerously inclined to get rid of themselves or others, for the good of the asylum as a whole. We have to look at this question from the standpoint of a doctor and of a relative, as well as from that of a philosopher or an asylum-improver. Much praise is due to the English Commissioners for the anxious solicitude which they have displayed in getting a proper system of night-nursing and watching introduced into the English asylums, with the view of preventing the accidental suffocation of epileptics during a fit (though to some the question of the value of a confirmed epileptic dement's life may appear a small matter), and in insisting on watching by night of the suicidally inclined and the sick. At page 182 of the 14th report of the General Board of Lunacy for Scotland, the following sentence occurs:—"The list of deaths presents an unusual number from accidents, but it is satisfactory to be able to report that this unfortunate result is not due to any laxity of management, but mainly to an unfortunate concatenation of events" (!) One was a suicide on probation, two were suicides from escapes, one of them through an open door, and one was a death from drinking carbolic acid, which had been left in an unlocked room, in an asylum with 175 patients. If at Hanwell, now-a-days, between two visits of the Commissioners, 42 deaths of this sort occurred, which is in the same proportion, I am quite sure there would be some further explanation necessary.

In the sister country north of this, there has been much stir lately made as to increased liberty for asylum-patients and its beneficial effects; and the review which appeared in our Journal of the 1883 report of the General Board of Lunacy for Scotland, penned ostensibly by a very friendly critic, administers lavish praise to Commissioners, Deputy-Commissioners, who are so enthusiastic that they believe a "boarded-out dement" is better off than an asylum-patient, and infinitely better off than a British working-man, or that the nursing of an insane mother by a lately-recovered daughter is prophylactic against a return of the malady to the latter. "Everywhere there seems to be activity, zeal, a desire to try new ideas."

"The Reports on Asylums by the Visiting Commissioners are mostly laudatory."

This is all very well, and we are glad to hear that such a good state of matters exists. There has been, however, a tendency on all occasions of late years for the mode of treatment

of lunatics in Scotch asylums to be extolled rather at the expense of that in force in England, and we have heard a very great deal of the "open-door system," the farm-work and the "boarding-out system." As I remarked in a former paper, why do we not have these matters all laid before us in such a form that we can trace their actions on the prosperity of the asylum as to recoveries, comfort, happiness and safety of its inhabitants, as well as in its monetary aspect? It should be borne in mind also that before the Scotch Commission was formed, two English Commissioners, Mr. Campbell and Mr. Gaskell, gave their assistance and labour in the original Royal Commission. At the present moment the two principal Royal asylums are superintended by physicians who practically made their fame in charge of English county asylums, while in two other Royal asylums, the physicians acted as assistants in English asylums, and the same is the case as regards three of the district asylum superintendents. Now, with these facts before them, it does not look too well to have an attempt made to elevate "a Scotch system of lunacy and its treatment" into too high a position at the expense of English *confrères*.

It is quite true that some of the Scotch asylums are most admirable, that one of them has cost more per bed than any asylum in Great Britain, but at my visits I have seen asylums with grave defects, and within the last eleven years I have seen in Scotch Asylums evidences of want of progress of a more glaring character than I have noticed in any English asylum. I do not think it profitable to enter on this subject in detail. I believe that many misapprehensions are caused by writing about and discussing modes of treatment and amount of liberty which should be given, recovery and death-rates, without really knowing whether the character of the material dealt with is at all similar. I would respectfully suggest to my fellow-superintendents the advisability of giving in their reports a table such as is to be found in my report of this year, which contains data concerning the inmates of this asylum on December 31st—the nationality, numbers of those epileptic, general paralytic, suicidal, above 70 years of age, under continuous night-supervision, employed usefully, bed-ridden from age or disease, probably curable, and the number and proportion of attendants. To anyone conversant with asylums and asylum-management such a table will at once convey with comparative accuracy a fair idea of the patients and the difficulties of working the institution. In remarking on, reporting of, and

deducing conclusions from, states of asylums, too little attention has hitherto been given to the character of the patients previous to admission, or to the different forms of insanity from which they suffer. An asylum which contains the whole of the lunatics of the parish or district for which it is built, has probably a different class of patients from an asylum in a county where a considerable proportion of lunatics are kept in workhouses, and the forms of insanity occurring in quiet rural districts are very different from those drawn from urban or pit districts. The insane miner from Newcastle, Durham, or the Whitehaven district in Cumberland, is a very different patient from the Fife weaver or the Argyle shepherd.

I give here certain data concerning four English asylums and four Scotch asylums; the latter are worked partially or wholly on the "open-door" principle. I heartily thank the medical superintendents who have kindly furnished me with the data contained in the table on opposite page. A glance at it will show the different character of the patients in these asylums, and the greater proportion of escapes in the four Scotch asylums.

Many escapes really are of little consequence, being those of patients unlikely to injure themselves or others, and quite fit to take care of themselves for a short period.

A large proportion of the escapes at Garlands have been of this nature. Then patients on parole at times walk off. I have seen some extraordinary and unaccountable instances in which harmless and demented patients, lacking in nerve-energy, who for years have been trusted to do some simple and regular work have some fine day walked off. I believe this is really due to a slight attack of excitement.

But then comes another variety of escape, which we must look at quite differently. The suicidal, the homicidal; the young wife unfit for the time to protect her own person; the erotic young girl anxious, owing to her state, to find a partner who shares her feelings and will indulge them. These cases exist. I think no one will gainsay this. The relatives, the wife, the husband, the father, the brother consign them for security as much as for recovery to the asylum; and it is quite known to us that in many of such cases, time, the great healer, is the only remedy, and that to safely tide the patient over a given number of weeks or months is the sure road to recovery.

I have been eighteen years in asylum practice, and have not yet reached the stage that I can take certain escapes coolly.

Table giving Data concerning Inmates in Four North of England Asylums and Four Scotch Asylums,* on December 31st, 1883.

Asylum.	No. of Patients.	Epileptics.	General Paralytic.	Suicidal.	Above 70 years.	Bedridden.	No. of Escapes.
Carlisle	511	53	12	35	31	48	14
Northumberland	438	31	9	70	17	5	3
Newcastle (City)	286	36	13	14	8	5	5
Durham	1109	112	71	75	38	50	20
Argyle District	335	15	1	10	19	6	10
(Lenzie) Barony Parochial	522	46	21	38	19	14	16
(Rosewell) Midlothian District ...	214	9	1	13	21	4	14
Fife and Kinross District...	327	15	8	11	11	15	32
Totals in 4 English	2344	232	105	194	94	108	42
Totals in 4 Scotch	1398	85	31	72	70	39	72
Percentage in 4 English		9·8	4·4	8·2	4·0	4·6	1·7
Percentage in 4 Scotch		6·0	2·2	5·1	5·0	2·7	5·0

* Partially or wholly worked on the Open-Door System.

Until last year I had been specially fortunate, but many a miserable hour certain escapes have cost me. I have known an escaped patient fished out of the neighbouring river, another just caught on the bank, and several other similar casualties have been averted by a kind Providence. One patient told me on his return that the sun was so beautifully out and the day was so lovely that it had prevented him doing what he purposed. I have been told by a medical superintendent of a young female who escaped, telling that the night of her escape she had connection several times with a man she met.

It is easy for an official who never has had charge of an asylum to talk loosely in praise of extended freedom for the insane, but an asylum-doctor who knows the forms of insanity practically, who is entrusted by relatives with their insane, will have a bad time of it if a patient, while he is declared to be unfit to have care of himself, suffers in person from want of ordinary care and precaution. I think any unbiassed mind must consider the medical man very reprehensible who gives entire freedom to those clearly unfit to use it aright. In saying this I, of course, exclude errors of judgment in individual cases where all reasonable precautionary measures have been adopted.

At page 33 of the twenty-third report of the Scotch Lunacy Board the following sentence occurs: "And in the Barony Asylum at Lenzie, which accommodates upwards of 500 patients, there is free communication between all the wards as well as free egress from each of them to the general grounds of the establishment." Is what is here stated meant? Can any of the patients from any part of the asylum, and labouring under any form of mental disorder, go as they see fit out of the asylum at will to the grounds? If this is so what security does the asylum-treatment offer? The relatives should surely be aware that the lives and honour of the insane sent to the asylum are so left to the guidance of the individual whose mental state was deemed such as to prevent his being dealt with at home. If, however, it is intended only to convey that there is a possibility of getting out, what the better are the patients off? If the door, though open, is guarded, it is merely reproducing the sufferings of Tantalus, which may be good mental discipline for some patients, but is, I know, detrimental to others.

I have seen restless melancholiacs, determined on self-injury, who resisted everything, dressing, undressing, feeding, &c., who even in a day-room, with a door opening with

the ordinary handle (for at Garlands portions of the interior of the asylum were worked without locks in 1867), would struggle to get through, and when the door was locked would at once subside and settle. And one of our chief authorities on asylum-matters in the North told me lately that a private case of this class under his treatment, who resisted everything, was walked about under the charge of two capable attendants till, from her actions and the necessary restraint of them, her hands and arms became seriously inflamed. In this case by locking the patient in a large room with the two attendants, she at once gave up some of her worst practices and gradually improved, so that she could be more easily dealt with. Now is it meant in the sentence quoted above that such cases are allowed to roam through the woods and grounds of Lenzie unattended or at their will?

Garland's asylum is not surrounded by a big wall, with only one exit through a constantly guarded gate. It never had walled-up airing courts, where on looking down from an upper window one could see the patients walking about as if at the bottom of a well; for many years, all, except those physically unfit, have gone beyond the airing courts for exercise. Farm-labour and other industries were in use even before the recent *furore* on the subject.

The patients likely to escape have neither been restrained mechanically, nor have they had "escaped from —— asylum," printed in large black letters on the back of their white trousers; nor have they been dressed in yellow on one side and black on the other.

So far as I can understand what is called the "unlocked door system" of working an asylum, it is merely substituting human vigilance for the lock; the patient gains no more liberty, and the wonderful thing is that it is applied to all portions of the asylum, even where the patients are most anxious to escape and least to be trusted. When I was assistant at Durham asylum in 1866 patients on parole lived in some cottages; but in their case they were trusted, and went out and in of their own accord. This is what I would call a true open-door system. Previous to the date that I began asylum-practice, I am aware that at Morningside, under the able, kindly, and progressive superintendence of Dr. Skae, patients lived in two houses in the grounds, which during the day, were open, but at night had the out-door locked. The patients were of course carefully selected and were considered trustworthy.

The mode of treatment in the Fife asylum is a more full development of what has been long in use, while the dangerous and suicidal, few in number in that asylum, are carefully looked after and locked up.

In this asylum there are so many doors opening to the outside that it would certainly cause an increase of attendants if I had to place one as a *Cerberus* at each outside door; and though the comforts of the asylum are fair, and I think will quite bear comparison with those of most of the Scotch asylums, yet I have many misguided patients who still have the feeling that home-life is preferable to life in an asylum, and would put their views into practice if they got the opportunity. We know that in the heart of all there exists an instinctive love of personal liberty, and few can entirely repress some inclination even for the moment, to sympathise with attempts to escape. So far as I can learn, the open-door system has not been adopted either in the Royal Edinburgh or Glasgow asylums, whose medical heads—lecturers at their Universities—are justly held to be *the authorities* on asylum-treatment in Scotland. Nor by the following named superintendents whose sagacity, knowledge, practical experience in the treatment of insanity and success in asylum-management is unquestioned, and must command our respect, and whose example must necessarily be looked up to with reverence by those who, like myself, younger in years, are less ripe in experience and knowledge. I refer to Drs. Jamieson of Aberdeen, Howden of Montrose, Rorie of Dundee, Grierson of Melrose.

Dr. Sibbald is the only one of the five members who at present constitute the General Board of Commissioners in Lunacy for Scotland who has had the advantage of studying insanity and its treatment practically as a medical assistant, and afterwards superintendent of an asylum for the insane. In the latter capacity he was well known as careful and cautious, as well as kindly and skilful; and that he kept the individuality of patients and the special character of cases prominently before him in treatment (as all rightly constituted medical minds should do) and evidently held very strongly the views I advocate in this paper, while he was responsible, as medical superintendent, for the lives of the patients under his charge in the Argyll asylum is, I think, clearly proved by the following. I quote from his report for the year 1866, at page 9, where at considerable length he details the case of a patient who had very suicidal propensi-

ties. "She would bite herself or others, or attempt to commit suicide by strangling, or by beating her head against the floor or wall." "The case is particularly worthy of notice, however, as being one in which the medical superintendent did not consider himself justified in refraining from the use of mechanical restraint." "The superintendent, while cordially recognising the advantage of the general abolition of such restraints, considers that in such exceptional cases as this it would be pedantic adherence to a rule and not the preservation of a principle, which would dictate the refusal to employ them." The daily average of patients in the Argyll asylum for this year was 118. In large asylums such cases are frequent.

The proper medical aspect of the treatment of the individual with the view to probable recovery, if the suicidal paroxyms were safely tided over, was clearly present to the writer when this was indited. The life of a lunatic is as valuable now as it was then, and insane patients now are as suicidally inclined as they were then. While writing this paper a Scotch patient of mine put his head deliberately in the fire and kept it there till he was pulled out. If facilities were offered him he would not be long a patient. At page 13 of the twenty-fourth report of the Scotch Commissioners a table is given of the escapes per 1,000 patients in asylums. I have made use of it for purposes of comparison, and I find that from 1871 to 1881, inclusive, the escapes in Scotland have been at the rate of 3·8, while the escapes from Garlands have been at the rate of only 1·7 per cent. I know that it may be easily said that you house your patients up so tightly they have no chance of escape, but this tells upon your recovery rate, and your patients are not nearly so happy as they might otherwise be.

Now happiness is a difficult question to estimate, so I do not propose to discuss it at any length. However, patients during lucid intervals have told me that the feeling of happiness experienced by them during attacks of excitement was most intense. We know that many of those capable, from mental constitution of states of exhilaration and excessive happiness, also experience from slight causes intense misery.

Exaggerated happiness and contentment are the prominent features in several forms of mental disorder. To expect great happiness in patients in an asylum, away from relatives, from home, from all the struggles which make life interesting and the successes which make it enjoyable, shows

a want of knowledge of the human mind. When great happiness and contentment exist among the patients of an asylum, there must be something far wrong.

If patients were happy and content in an asylum, why should they wish to leave it and face the world. A patient recovering with the hope of discharge kept before his eyes may for the time be content and cheerful. Patients who realize that they have recurrent attacks of mental disorder may have the sense to become resigned to life in an asylum and try to make the best of it. And some old broken-down patients, friendless and homeless, may in time look on the asylum as their home and the officials as their best friends. Certain patients exist whose mental calibre is so small, whose powers of enjoyment are so limited, that the mere satisfying of their creature-comforts produces a sort of contentment which to them probably constitutes happiness. Most of the asylums in Great Britain now afford the creature-comforts required by this class. Many patients in asylums, like other people outside, are unhappy and miserable from the ever present recollection of former misdeeds, and their memory of the past causes unhappiness and fearful forebodings for the future. The absence or presence of locks on the doors may interest them only as offering a greater chance of escape from the asylum and the world, it affects not their happiness—for them a draught of the waters of Lethe would be treatment at once efficacious and pleasant. To many patients, however, an asylum is really a place of detention. You may employ, you may amuse for the time, but you can never get them to rid themselves of this feeling.

But with recoveries it is quite a different matter. We have sent our patients out as recovered, fit to take care of themselves, presumably fit in most instances to maintain themselves; and, taking it over a period of years, I should, after examination of the re-admissions and the number of individuals discharged in one year, be satisfied of the honesty of intention in registering recoveries in most public asylums. I compare the returns of this asylum which, of course, I know best, (possibly many other English asylums might show a better record if I had time to reckon up their results) with those of the three Scotch asylums where the open-door system is in part or entirely in use. Where the individual asylum has not been the ten years at work, I give the number of years for which the calculation is made. I have to end the period at 1881 as I have not later reports in my posses-

sion, and owing to the form of table adopted in the Rosewell asylum I am unable to include the return from this asylum.

RECOVERY-RATE CALCULATED ON ADMISSIONS, VIZ. :—

Name of Asylum.	Length of Time.	Percentage of Recoveries.
Fife and Kinross............	10 years, ending 1881.	43·9
Argyll and Bute............	10 years, ending 1881.	32·0
Lenzie (Parochial)	5 years, ending 1881.	46·5
Garlands	10 years, ending 1881.	47·7

The presence of locks does not seem to have had any evil influence on the recovery rate at Garlands, and I may here say that the report of 1882 of this asylum shows an average recovery rate of 47·3 per cent., a death rate of 8·1 per cent., with one suicide and one accidental death occurring in the asylum during the ten years ending 1882, and that during that time only one patient who escaped was not recovered within the time the order was in force, and that this was entirely due to assistance of relatives who, if they had stated their wish, would at once have got the charge of the patient in the proper manner; they subsequently, I believe, deeply regretted their action.

At page 111 of appendix B of the twenty-fourth report of the Scotch Commissioners the following sentences occur in the report on the Lenzie Asylum :—"Eleven escapes are registered, the patients being absent for at least one night. They all either came back or were brought back. For some of them no search was made, as it was believed they were in safety with friends, and that they would return. This indeed was the case as regards four of the eleven who escaped. They went to friends in or about Glasgow, and after a short absence voluntarily returned to the asylum."

We, of course, understand that as no fault is found with this mode of dealing with escapes it is officially approved of. Certainly it is not what was taught me when I was an assistant, or what I have practised as a superintendent, or inculcated on those who have medically assisted me, and though patients may at times come back or be brought back,

they may quite well cause injury at home to relatives or even be an annoyance to the public; and, when they do not come back alive, I for one think it does not look well, even in print, that it should be the recognised thing not to send after escapes. I quote the following which must, of course, be authentic, as it is an editorial note from page 456 of the October number of the "Journal of Mental Science," 1883: "In May last a female patient escaped from the Lenzie Asylum, Glasgow, through an unlocked door, and was killed —whether suicidally or not is unknown—on the railway near the asylum.

"The Public Prosecutor for the county has intimated to the asylum-authorities that if such an accident occurs again it may be his duty to institute an investigation as to whether there has not been culpable negligence in the custody of the lunatic; and the husband of the deceased woman has, we observe, raised an action against the managers of the asylum for damages for the loss of his wife. The managers have compromised the action by a payment of £50 to the husband. A very serious question is thus raised, and one which involves the increase of the already sufficiently heavy risks and anxieties of asylum-physicians. We believe that during the last year the number of suicides in Scotch Asylums has been unusually large. Is this a mere coincidence, or is it associated with the granting of a greater amount of liberty?"

I quote the following from the late Sir James Cox's pamphlet on "Lunacy in its Relations to the State," published in 1878. "When a man becomes insane it is held to be the duty of the State, in modern civilised communities, to provide for the protection of the public against risk from his actions; and also to provide for the care and safety of the insane person himself, and the protection of his estate, whether imperilled by his own acts or the acts of others."

Fashions change. Men's views change, and have done so since time began, and it may be that as time goes on we shall change our views completely as to the proper mode of dealing with insanity, and as to the higher meaning of the word philanthropy so far as insanity is concerned. In some quarters, to judge from articles which have appeared on treatment, great changes seem taking place in the views held and expressed by some members of our department, though such expressions are just the logical outcome of the indicatory expressions of some official authorities. A most able article on the "Punishment of the Insane" appeared in the

April number of our Journal for 1883, which deals with certain matters of treatment, and most excellently describes the essential elements of the recognised modern treatment of the insane, "kindly care and sympathy, careful medical treatment, as much freedom as possible, and as little as practicable of the feeling or the appearance of restraint, safety being the only limit of freedom."

Some asylum-officials and others clearly have so advanced in their views as to consider it reasonable that entire personal freedom should be given to patients dangerous to themselves. In a short time an advance in education and views may also prevent our interfering with those presumably dangerous to others until they have proved themselves to be so distinctly.

We may have asylums in the future divided up into classes, viz., asylums for recovery, with precautions and safety to life, asylums for recovery with moderate risks; asylums for recovery at any risk, freedom and excitement, shooting, boating, and ballooning, the true aids to recovery open to all!

The determination of the character of the asylum to which a patient is to be sent will present some nice points of interest, and we may expect to see quite a run of paying patients to the latter-mentioned class of asylums when the expectant heirs of an insane patient, or husband, or wife, anxious to remarry, *et hoc genus omne,* have the matter properly before them.

Can it be that some of the younger members of our department are striving to excel each other in carrying out notions so belauded by the Scotch Board of Lunacy? It would be well gravely to consider whether the discovery that lunatics should be punished like ordinary men is not the natural development of such fancies.

Is there no apostle of this new gospel capable of putting pen to paper and expounding to us its blessings? Are we to trust alone to official laudation as our only source of information as to the glowing results obtained? Can we not have the matter brought before us "in a true, full, and particular manner," dealing at length with the statistics of recoveries, escapes, and deaths from suicide and accident, and, if possible, by the superintendent who has had the longest and most varied experience of this much-extolled mode of treatment?

If we were convinced that the open-door system of treat-

ment increased the recoveries, reduced suicides and accidents, and promoted happiness, we should be very wrong, almost culpable, if we did not at once adopt it. We should have the facts put before us so that we may judge of the matter dispassionately, and at leisure. To visit an asylum where even *open sesame* is uncalled for during the walk through, in the middle or visiting part of the day, is not the way to get an idea of the efficacy of the treatment. At Garlands during the forenoon, and for two hours in the afternoon, the wards are empty, and the doors for the most part open in all but the sick wards. Let us, if possible, get a true and full account. Such a communication will be of the highest value. Ovariotomy once decried now saves the lives of hundreds, and if we could elucidate, as I am endeavouring to do, the true facts of the open-door system, it is possible that we may increase our recoveries and the happiness of our charges, and do so perhaps at only a monetary expense, without additional risk or anxiety, or perhaps with a diminution of all. But on the other hand, when the whole truth is known it may turn out that what is possibly is not actually the fact.

An Inquiry into the Value to be Attached to the Different Recovery Rates of Different Asylums as Tests of Efficiency. By T. A. Chapman, M.D., Hereford.

In the "Journal of Mental Science" for April, 1883, I presented some statistics as to the recovery and death-rates of asylums, especially directed to the question of the effect of the size of the asylum upon them. In that communication I stated an opinion (p. 9) that the dominant element governing the different rates of recovery in different asylums was to be found in the different classes of cases admitted into different asylums, and expressed a hope of some day being able to make a further research in this direction. Table VII. of the tables of the Association obviously afforded the most hopeful available means of doing so, but how much could not be seen until a laborious abstract of its contents for a number of asylums over a series of years was made.

This I have at length worked out, and find that certain definite conclusions can be derived from it.

This Table VII. is the Table E. of Dr. Thurnam, and divides the admissions into four classes according to the duration of the disorder, and though it is a somewhat bare and

meagre classification, not according to the nature of the disease, but merely as to its duration, it does give four classes of very different prognosis, as may be shown by the recovery-rates of the different classes.

Recovery-Rates of the Different Classes in Table VII., extracted from "Journal of Mental Science," July, 1877. Both sexes.

Duration on Admission.	Thurnam, Table E.	County Asylums for year 1875.	Hereford Asylum, up to July, 1876.
Class I. First attack and within three months	78·18	46·0	62·0
Class II. First attack above three and within 12 months ...	45·00	29·0	17·0
Class III. Not first attack and within 12 months... ...	60·95	50·0	72·0
Class IV. Over 12 months. First or otherwise	19·16	10·0	1·0

In collating this table I have simply taken the largest supply of material available, and having a tolerably complete set of asylum-reports for the past eleven years, I have in most instances taken that period. I have omitted the tables of asylums within a few years of opening. In some cases the tables are not given, and in others for only a part of the time; in others the tables have been made out in an obviously erroneous manner, so as to be utterly useless, as, for instance, in the Norfolk Asylum Reports.

In making such an analysis of the admissions, imperfect though it is, we expect to find that if an asylum has a high recovery-rate due to efficiency it will also have a high recovery-rate in each of the classes into which we have divided the admissions. If we find that such an asylum has high rates in some classes and low in others, we must conclude that these classes have in themselves further peculiarities that will account for the differences, as it would be absurd to conclude that an asylum has a high rate in one class due to efficiency, and in another a low rate due to inefficiency. It is further

obvious that an asylum with a high general recovery-rate may have low rates in each of the classes, the high general rate being due to the proportion of the more favourable classes being above the average, whilst equally an asylum with good recovery-rates in all the classes may have a bad general recovery-rate owing to an excess of the unfavourable classes. An asylum with a large proportion of Classes I. and III. among its admissions will have a good general recovery-rate, one with an excess of Class II., and especially of Class IV. will have a low general recovery-rate. For example, Carmarthen, with a general recovery-rate of 22·8, and Macclesfield with 33·2, have better rates in the three most important classes, I., II., and III., than Essex at 40·6 (except as compared with Carmarthen in Class I.) and Leicester Borough at 41·4; but then the former have only 35·4 and 55·7 per cent. of Classes I. and II. in their admissions, the latter 79·3 and 84·0.

In comparing the recovery-rates of different asylums in the several classes, I attach much the most importance to Class I., because, since it contains much the most curable patients, efficiency must be most clearly observable in the results here. Class III. does indeed present a larger ratio of recoveries than Class I., but their variation in different asylums probably depends more than anything else on the existence of a larger or smaller number of recurrent cases, or on a different practice as to discharging such cases during remissions. In only one or two instances does a high general recovery-rate appear to depend on some such circumstance, as, perhaps, the cases of Lancaster and Cumberland, which have high general rates, not accounted for by high rates in Class I., nor by large proportions of curable admissions, but have high recovery-rates in Class III. Similar remarks as to individual asylums might be made in other directions, but a short study of the tables given will suggest most of these.

I give here a table summing up the whole of the materials examined (omitting several of the least trustworthy asylums), giving the results for 93,443 cases classified as in Table VII., much the largest number that has, so far as I know, been collected into such a table. The percentages differ appreciably from those founded on the year 1875 only, which I gave in the Journal for July, 1877, in Class I. (F.), Class III. (M.), and Class IV. (F.), being larger in each instance. This is accounted for probably by reasons stated by me at that time, and especially, perhaps, because I was not then able to

detect and reject doubtful statistics, as I am to some extent able to do here.

The Admissions and Recoveries, and Percentages of the latter on the former, arranged in Classes as per "Table VII.," of 46 English County and Borough Asylums and the Edinburgh and Glasgow Royal Asylums for (in most instances) 11 years, 1872 to 1882 inclusive.

Classes.	Total Admissions.			Total Recoveries.			Percentage of Recoveries on Admissions.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Class I. ...	18786	19497	38283	8411	10243	18654	44·77	52·53	48·72
Class II. ...	6155	5971	12126	1424	1997	3421	22·99	33·44	28·21
Class III. ...	8701	10873	19574	4368	6126	10494	50·20	56·34	53·61
Class IV. ...	10424	9873	20297	1181	1275	2456	11·33	12·92	12·10
Total* ...	46300	47143	93443	15892	19576	35468	34·32	41·52	37·95

There is one point in the abstracts I have made in which they are not strictly comparable owing to a mistake of my own in first making the abstracts. Some asylums separate, as a Class V., VI., &c., congenital cases, unknown, unascertained, &c.; others lump these together in Class IV. I began by omitting these where omitted, but finding I could not always do so, afterwards lumped them. This makes a variation in the figures, which is, however, of small amount, and in a comparatively unimportant portion of the figures.

The full abstract involves a large array of figures with which I do not like to burden this paper.

It may enable me to somewhat abbreviate the remainder of this paper, without sacrifice of perspicuity, if I state at once the largest conclusion at which I arrive after a study of these figures. It is customary in asylum-reports (I have done it myself, and may probably do it again) to state the recovery-rate for the year to be satisfactory, &c., clearly

* This total does not agree with the additions, owing to the circumstance alluded to in the text.

suggesting a belief that a high rate of recovery is a proof of the efficiency of the asylum. There can, of course, be no doubt that efficiency is proved if it can be shown that the recovery-rate is higher than the average for the class of patients treated ; but then no clear measure of the class of patients, and what would be an average recovery-rate for them, is ever indicated.

The conclusion at which I arrive, broadly stated, is that these statements, as usually made, are without meaning. That the different rates of recovery obtaining in different asylums, whether we take Carmarthen with 22·8, or Cumberland with 47·4, appear within so narrow a margin to depend on the different classes of patients admitted to different asylums, that we may feel certain that had the classification of patients available for our analysis been of a less general character, the differences would have been fully accounted for. Indeed, it is remarkable that the outstanding variations should be so small.

This conclusion is not, I think, disturbed by the occurrence of such anomalous cases as those of, for instance, Burntwood and Banstead, where the recoveries in Class I. are less than half the average, or of Bristol, where they are nearly double the average.

The cases that are most disturbing can usually be accounted for by carelessness, or other error, in the compilation of the tables. I have already alluded to one or two instances where the figures given are obvious nonsense ; but there are a few other instances that, whilst not outrageously absurd, are still so contrary to the general drift of the figures as to suggest some error. For instance, nothing can be clearer than that the proportion of recoveries in Class I. should exceed those in Class II., usually by from 50 to 60 per cent. Yet Burntwood cures 33·3 per cent. in Class II., which is a very fair figure, and only 23·4 in Class I., which is a very low one. Somerset gives 51·4 in Class II., which is far too high—only one other asylum exceeding 40—and only 42·4 in Class I. ; Sussex gives 35·3 in Class II. and 32·6 in Class I., and the City of London brings these figures too close, viz., 37·8 and 38·5. Then again, Prestwich claims to cure 30·7 per cent. of Class IV., but since in the other three classes Prestwich takes a high but by no means a first place, and since only one other asylum cures more than 20· per cent. in Class IV., there can be little doubt that cases properly belonging to the other classes have been here included in Class IV.

Possibly, indeed, the circumstance, which I think has appeared to be suggested by other statistics of Prestwich, that cases are selected in the sense that a large proportion of unfavourable cases are kept in the workhouses, especially affects the statistics of Class IV. Since, however, a similar selection, though perhaps less marked, takes place in regard to other asylums, one would not have expected Prestwich to stand forward so prominently if this is the true meaning of this figure.

With regard to Class IV. especially, the result of errors in tabulating so varies the rate of recovery that any comparisons between different asylums in this class are probably wholly fallacious; a few instances of Class III. are very apt to get into it, and even perhaps of Class I., and the true recovery-rate of Class IV. is so low that a very few extraneous recoveries added to it seriously affect the percentage. In most asylums Class IV. contains so many imbeciles, cases of advanced brain disease, of senile dementia, and other chronic and incurable forms of disease, that I feel considerable doubt of the accuracy of the figures wherever the recovery-rate much exceeds 10 per cent. At the same time, since a small inclusion of extraneous recoveries has a large effect here, this figure may be rendered worthless by an amount of error that does not very materially affect the figures in the other classes.

I am unable to refrain from stating my impression that, in not a few of these cases, also when Class I. presents a low rate, it is not due to inefficiency in treatment, nor to an unfavourable class of cases having to be treated, but to want of care in tabulating; not a few cases that ought to be in Class II. or Class IV. being in Class I., chiefly because the duration stated by the relieving officer has been accepted. It is still, unfortunately, the practice in some asylums to let the facts (?) of the "statement" be slavishly copied into the admission-book as possessing an official sacredness, and then to tabulate from these without further care or thought.

This practice will tell on our figures in two ways: first, it will depress the recovery-rate in Class I., and, secondly, it will increase the stated proportion of curable cases. Thus, in several asylums having a gross recovery-rate of about 35·0, a lower rate of recoveries in Class I. is accompanied by a higher rate of curable admissions, but if some of the incurable cases in Class I. could be relegated to Class IV., the recovery-rate of Class I. would be improved, and the stated proportion of curable cases would be diminished. The tendency of the

statement always is to abbreviate the duration, cases of senile insanity of several years' duration, and utterly hopeless as regards recovery, being often entered as having lasted "a week," "ten days," and so on. This grievous flaw in the value of these statistics has several times nearly led me to give up the whole inquiry as seriously vitiating the results, and preventing the real meaning of the figures from appearing. On the whole, however, though thus vitiated, there is a sufficient mass of trustworthy matter to indicate in what direction the truth lies, and to afford a useful amount of valuable meaning.

When we go into details as to individual asylums, there are very few that do not present some anomaly requiring explanation, whether by errors in tabulating, or by some special local characteristics of certain classes of the admissions.

Not only broadly, however, but also with considerable detail, the figures show that those asylums that habitually give a low rate of recovery might claim a high one; thus, for instance, Carmarthen, at 22·8, cures 52·3 per cent. of Class I., which is above the average. On the other hand, those in higher positions might be lowered; Leicester Borough, for instance, with 41·4, might be put in a low place as curing only 42·9 per cent. in Class I., if judgment is based, not on the gross recovery-rate, but on the rate in the different classes.

I tabulated also the proportion which the deaths from general paralysis and from cerebral diseases bore to the total admissions, but have not been able to throw much light on the other figures by their means. It is, however, no doubt more than a coincidence that the two asylums with the lowest general recovery-rates, 21·1 and 21·4, and the lowest recovery-rates in Class I., 23·4 and 30·3, have also the highest death-rates from cerebral disease, viz., 31·0 and 38·1, the next highest being 27·7, and only three exceeding 25·0. Whilst the only three asylums with a lower rate than 14, viz., Prestwich 11·2, Cumberland 12·7, and Hereford 13·4 (omitting London and Somerset, whose figures cannot be trusted), have high rates of recovery in Class I., viz., 53·9, 54·6, and 59·6 respectively.

If we take the six asylums with the lowest recoveries in Class I.—omitting Sussex and London as untrustworthy—and the nine with the highest, the ratios of deaths from cerebral diseases are respectively 25·0 and 16·0. The intermediate figures are less marked, but these results are sufficient to show what is very important, that a higher or lower rate of recovery in Class I. may, and probably usually

does, depend on a difference in the nature of the cases included in it rather than on the efficiency of the asylum in treating them. This may be further illustrated by the case of Bristol, where no less than 77·8 of the cases in Class I. recover. Now two circumstances show that this cannot be due to any unusual efficiency in the treatment pursued at Bristol. One is that in Classes II., III., and IV. the results at Bristol are very poor, especially in Class II. (Banstead 12·0, Bristol 12·4, only one other under 20·0), and Bristol cannot be at once both the most and the least efficient asylum. And secondly, an analysis of Hereford cases shows that, did every case in Class I. recover, in which recovery was in the slightest degree possible, the recoveries would not amount to 77·8 per cent. Probably there is a habit in Bristol of sending to the asylum an unusual proportion of transient cases.

The following analysis of the admissions in Class I. for two years at the Burntwood Asylum, for which I am indebted to Dr. Spence, compared with a similar analysis of Hereford cases, further illustrates the different character of the cases dealt with in different asylums, and shows that whilst Bristol, for instance, deals with a class of cases under Class I., much more favourable than Hereford (taken as nearly an average), so Burntwood has a much less favourable class.

ANALYSIS OF CLASS I. OF ADMISSIONS 1881 AND 1882.

BURNTWOOD.

	M.	F.	Tl.	p.c.
Incurable from General Paralysis, Other Brain-Disease, Epilepsy, Old Age, Advanced Bodily Disease	29	22	51	42·5
Did not recover for other reasons	12	18	30	
Recovered ...	16	23	39	32·5
	57	63	120	

SAME ANALYSIS, HEREFORD—1880-81-82.

	M.	F.	Tl.	p.c.
Incurable from above well-defined causes	12	3	15	24·0
Did not recover, including 3 discharged convalescent	8	5	13	
Recovered ...	18	15	33	54·1
	38	23	61	

In Table I. I have placed the asylums in the order of the percentage of total recoveries to total admissions, and show

in it the number of years dealt with, the percentage on the admissions of the total recoveries, and of the recoveries in each of the four classes in Table VII., the percentage of the total admissions that Classes I. and III. form, and the percentages to the total admissions which the deaths from general paralysis and from cerebral diseases constitute.

TABLE I.

	No. of Years.	Gross on Recd.	Recd. in Classes				p.c. Prop. of 1 & 3 to Total Admns.	Prop. G.P. Deaths to Total Admns.	Prop. Deaths from Cer. Dis.
			1	2	3	4			
Burntwood ...	11	21·1	23·4	33·3	23·2	8·1	52·0	9·9	31·0
Banstead ...	6	21·4	30·3	12·0	32·8	9·9	53·0	12·6	38·1
Carmarthen ...	11	22·8	52·3	23·7	47·3	5·2	35·4	2·4	15·3
Oxford ...	4	28·9	45·5	15·4	39·3	6·8	59·0	2·0	15·0
Bridgend ...	11	29·5	38·7	21·5	46·5	8·3	57·0	6·6	19·8
Hereford ...	10	29·5	59·6	27·7	62·4	4·8	45·0	5·8	13·4
London ...	10	29·6	38·5	37·8	54·8	18·9	41·0	5·0	11·5
Chartham ...	5	30·0	48·7	27·5	52·6	9·0	44·0	5·0	15·7
Hants ...	10	30·8	45·6	21·8	54·1	7·7	49·0	6·3	25·1
Berks ...	11	31·0	43·3	25·0	51·3	6·0	55·0	4·3	19·3
Beds ...	11	31·2	45·4	23·8	51·8	4·9	60·0	6·7	15·6
Northampton ...	5	32·0	40·2	37·3	41·9	5·9	66·0	4·5	20·4
Sussex ...	11	32·2	32·6	35·3	48·0	14·4	67·5	6·1	19·8
Ipswich ...	11	32·6	53·0	29·6	47·0	11·6	54·0		
Macclesfield ...	11	33·2	50·7	30·7	55·8	7·0	55·7	7·5	18·0
Bucks ...	11	33·5	48·3	35·7	56·5	7·6	52·0	2·5	18·2
Wilts ...	11	33·8	42·6	21.3	47·2	13·3	61·0	3·1	16·4
Warwick ...	10	34·1	54·4	33·8	52·1	11·9	48·0	11·0	23·0
Denbigh ...	8	34·2	49·0	29·0	47·2	8·4	59·0	4·5	14·0
Cornwall ...	11	34·3	56·8	22·5	44·9	5·7	56·0	3·9	18·6
Beverley ...	10	34·6	48·8	22·4	58·3	8·8	54·0	8·7	23·1
Cambs ...	11	35·0	43·8	20·0	59·9	5·8	66·9	5·1	16·7
Abergavenny ...	11	35·1	50·1	24·0	61·9	7·0	56·6	6·5	16·2
Hanwell ...	11	35·5	47·6	30·3	51·2	18·0	49·0	8·8	17·1
Notts ...	11	35·6	41·6	31·0	49·0	10·2	72·0	8·2	24·0
Stafford ...	11	35·6	41·0	24·8	60·1	13·2	62·0	8·7	23·0
Worcester ...	11	35·8	49·3	30·0	54·9	8·7	58·0	10·2	27·7
Wadsley ...	9	36·1	45·4	25·6	48·3	9·5	61·0	7·3	16·0
Brookwood ...	10	36·5	44·7	21·3	47·3	11·2	70·5	11·4	26·0
Northumberland ...	11	37·2	49·7	23·8	58·2	15·9	54·0	5·0	15·6
Colney Hatch ...	11	37·3	45·2	28·0	50·1	12·5	82·0	8·1	24·2
Lincoln ...	11	37·5	47·0	32·1	52·9	11·8	60·0	7·0	21·5
Somerset ...	11	38·1	42·4	51·4	42·1	16·2	65·1	3·8	13·8
Dorset ...	11	38·5	45·3	25·5	49·1	14·6	67·0	7·1	20·9
Chester ...	11	38·6	46·9	28·3	58·8	10·0	65·4	12·0	19·6
Newcastle ...	11	38·9	51·1	28·2	47·2	18·4	61·0	7·0	16·3
Bristol ...	11	39·3	77·8	12·4	56·4	2·1	52·0	7·7	17·3
Shrewsbury ...	11	40·0	61·1	24 4	50·1	12·1	59·4	5·7	16·8
Devon ...	11	40·4	61·8	32·2	55·5	16·2	52·4	9·0	16·5
Essex ...	10	40·6	45·5	26·3	53·3	12·3	79·3	3·5	18·9
Birmingham ...	11	40·6	47·7	38·0	58·8	11·3	65·2	9·0	22·0
Barming Heath ...	8	40·7	48·3	30·3	55·9	19·9	66·0	5·2	23·4
Derby ...	10	40·9	50·1	37·2	54·6	14·0	63·0	7·1	20·8
Leicester Borough ...	11	41·4	42·9	22·3	51·8	16·1	84·0	6·8	15·7
Leicester County ...	10	42·3	54·4	42·3	43·8	9·6	68·0	4·8	17·8
Lancaster ...	7	42·9	58·8	28·3	68·8	6·0	59·0	9·0	14·4
Wandsworth ...	10	43·0	48·0	30·0	64·4	20·2	72·4	5·1	14·8
North Riding ...	11	43·3	50·0	39·1	59·2	14·8	65·0	7·3	21·0
Wakefield ...	9	46·1	60·2	37·6	53·7	11·7	64·0	6·4	16·5
Cumberland ...	10	47·4	54·6	33·5	68·0	16·1	67·0	6·3	12·7
Prestwich ...	10	48·1	53·9	30·1	56·6	30·7	75·0	5·7	11·2
Glasgow, Gartnavel ...	11	37·4	46·8	22·9	45·6	11·0	75·7	5·0	17·5
Edinburgh, Morningside	10	47·1	55·2	33·9	56·7	19·5	69·0	4·0	10·6

A glance at this table will show that the recoveries in the several classes are not parallel with the total recoveries; though, if we select Class I. as the most important, and, if efficiency is to be judged by the fact that the proportion of recoveries presents a much better figure for this purpose than the gross recoveries, we find that the asylums with a high recovery-rate do not, invariably, have a good recovery-rate in Class I., whilst a good rate in Class I. is to be found in not a few asylums with poor general recovery-rates; but such asylums will be found to have a very low ratio of Classes I. and III. to their total admissions (Class III. having an even higher rate of recovery than Class I.). By compressing this table, and taking groups of asylums, advancing by 5·0 per cent. in the total or gross recoveries, we get—

TABLE II.

No. of Asylums in Group.	Gross Recoveries on Admissions.	Recoveries in Class I.	Percentage of Class I. and III. of Total Admissions.	Percentage of Deaths from Cerebral Disease to Total Admissions.
8	21·1—30·0	42·2	48·5	20·0
14	30·0—35·0	46·0	57·0	19·1
17	35·1—40·0	46·2	58·4	18·6
10	40·4—43·3	50·7	67·4	18·5
3	46·1—48·1	55·7	68·7	13·4

It might appear from this that the gross recoveries being parallel to those in Class I., either of these may be accepted as proof of efficiency; but in the first place the recoveries in Class I. vary much less than those of the total admissions, only from 42 to 56, the total recoveries varying from 21·1 to 48·1, and secondly, the last column shows that in those with lower rates in Class I. the admissions are of a less favourable class.

The following two tables show the same facts tabulated in the one case according to the recoveries in Class I., and in the other according to the proportion which the curable Classes I. and III. bear to the total admissions. These show that the recoveries in Class I. influence the total recoveries to almost the same extent as the proportion of curable admissions, and point to the same conclusion that appeared to result from Table II.—that efficiency as gauged by Class I. tended to show itself in the total recovery-rate. And I must allow that the figures admit of this interpretation to some slight extent. But it must be observed that we have, in the

first place, reduced by more than half the value of the total recovery-rate as a gauge of efficiency by showing that it is rather more governed by the ratio of the curable cases than by the recoveries in Class I. Then we observe still further that those asylums with a low rate in Class I. have a worse type of cases to deal with, though our means of grasping and gauging this circumstance is somewhat slender.

TABLE III.

ARRANGED IN ORDER OF RECOVERIES IN CLASS I.

Recoveries in Class I.	No. of Asylums.		Per cent. Curable Admissions.	Gross Recoveries.	
23·4-38·7	5	3	41-53	24·0	26·7
		2	57-67	30·8	
40·2-44·7	9	5	55-66	33·7	35·4
		4	67-84	37·1	
45·2-47·0	9	5	49-61	32·9	35·5
		4	65-82	38·7	
47·6-49·7	10	5	44-54	34·1	36·5
		5	58-72	38·9	
50·0-54·6	11	5	35·4-56·6	31·0	38·1
		6	61·0-75	43·5	
56·8-77·8	7	3	45-52	36·4	38·9
		4	56-64	40·8	

TABLE IV.

ARRANGED IN ORDER OF PERCENTAGE OF CURABLE CLASSES IN THE ADMISSIONS.

Per cent. of Curable Classes.	No. of Asylums.		Recoveries in Class I.	Gross Recoveries.	
35-49	7	4	38·5-48·7	31·5	30·3
		3	52·3-59·6	28·8	
52-55	9	3	23·4-43·3	24·5	32·3
		6	48·8-77·8	36·4	
56-60	10	5	38·7-49·3	33·6	35·3
		5	50·1-61·1	37·1	
61-65	11	4	41·0-45·5	34·1	38·3
		7	46·9-60·2	40·8	
66-70	8	4	32·2-44·7	33·9	38·2
		4	45·3-54·6	42·2	
72-84	6	3	41·6-45·2	38·1	41·0
		3	45·5-53·9	43·9	

If, instead of taking Classes I. and III. together, as giving a ratio of curable cases, we take Class IV. by itself as a measure of incurable cases, we find the result to be as follows:—

TABLE V.

ASYLUMS ARRANGED IN ORDER OF PROPORTION OF CLASS IV. TO TOTAL ADMISSIONS.

Proportion per cent. of Class IV.	No. of Asylums.	Gross Recoveries per cent.
7-9	3	38·4
10-19	9	40·3
20-29	24	36·0
30-38	12	32·9
42-46	2	29·5
54	1	22·8

which accords entirely with the results of Tables III. and IV.

If we use these figures to push a little further the inquiry into the effect of size or efficiency, we obtain the following table. The asylums under each class are those so placed by Dr. Rayner in his paper in the Journal of April 1883:—

TABLE VI.

ASYLUMS TABULATED ACCORDING TO SIZE.

Size of Asylum.	Gross Recoveries 11 years.	Recoveries in Class I.	Proportion of Classes I. and III.
Under 450.			
11 Asylums (Suffolk omitted) (no tables)	34·3	48·9	56·5
450 to 600.			
11 Asylums.	34·8	45·5	59·4
(10 without Burntwood.	38·1	48·1	60·1)
600-800.			
9 Asylums (Rainhill omitted)	35·9	48·5	59·9
Over 800.			
10 Asylums (Durham and Whittingham omitted.)	38·8	48·2	65·0

In this table 450-600 looks bad, but it has the misfortune to contain Burntwood, with nothing to balance it. With Burntwood omitted, it would have ranged fairly with the others, and the whole table would have distinctly indicated that size was on the whole prejudicial, but hardly to an appreciable extent, the recoveries in Class I. slightly diminishing with increase of size, whilst the gross recoveries increased, because the proportion of curable cases increased. But there is an item still to score against the large asylums, viz., that Whittingham is omitted, and its statistics, were they available, would probably be unfavourable, since from my last paper it appeared that just as Banstead gave bad figures to benefit those of Colney Hatch and Hanwell, so Whittingham appeared to suffer, though not so severely, for the benefit of the other Lancashire asylums, and especially of Prestwich. Lancaster and Prestwich are both in this group.

Could this omission be remedied, I think this table would tell appreciably, instead of inappreciably, against the large asylums.

It may be desirable here to correct an error in the paper just referred to ("Journal Mental Science," April 1883, p. 6, Table B). The per cent. admission of average number resident for over 700 should be 25·8 instead of 39·0. This is repeated on p. 15, Table N., the result of the error being to present large asylums in too favourable a light.

Looking at the main conclusion at which I arrive in this paper, it may be said that such a comparison of asylums of different sizes must be of no value, but this is hardly so. It may be that the gross recovery-rate is of no avail to compare individual asylums, and the rate in Class I. of but doubtful value for such a purpose; but when a number of asylums can be grouped together and treated as units (that is, adding the percentages together and dividing, not adding the admissions and recoveries and calculating a new percentage), the varying characters of cases are liable to be eliminated, and any balance due to efficiency might then appear.

In conclusion it may be safely asserted that—

I. The gross recovery-rate is quite useless as a gauge of the efficiency of an asylum, because:

II. The gross recovery-rate varies directly as the proportion of Classes I. and III. (Table VII.) in the admissions; and

III. The recoveries in Class I. vary directly (in such instances as can be analysed) as the curability of the cases included in it; and

IV. These results, based though they are on a very general analysis of cases and masked by some obvious, and many suspected errors in the figures supplied, account for so large a proportion of the variations in the gross recovery-rate, that a complete analysis might be expected so fully to explain them, that there would be but a very narrow margin left due to efficiency.

V. That there is an appreciable presumption (not at all amounting to proof or demonstration) against the efficiency of large asylums.

VI. That if there is not an absolute uniformity in the results obtained in different asylums in view of the different classes of patients treated, the results are much closer to such uniformity than the usually stated recovery-rates suggest.

Unverified Prognosis. By H. Hayes Newington, M.R.C.P.

(Read at the Quarterly Meeting of the Association, held at Bethlem Hospital, May 6th, 1884.)

In none of the more practical aspects of insanity, with the exception perhaps of that of pathology, does the alienist stand at so much disadvantage with the other members of the medical profession as in the matter of prognosis. In diagnosis we have, as a rule, an easy task, though now and then cases arise in which it requires much thought to come to a determination whether some unhappy event is due to insanity or to crime. Again, in treatment we fairly hold our own, taking into consideration the complex nature of the organs and functions that are affected, coupled with the impossibility of direct examination and treatment of them. But in prognosis we are distinctly less sure of our footing, and it is unfortunate that this uncertainty is accompanied by a most pressing demand for accurate forecasts from the relatives of those who are placed under our charge. This pressure, no doubt, arises in chief from the necessity in nearly every case for modifying, either temporarily or for good, those circumstances, domestic, official, and pecuniary, from which the patient has been removed; but there is this further difficulty, that while in cases of general disease, other than insanity, the friends have some sort of knowledge and opinion of their own as to the probable result, gained from insight into similar cases, in insanity such clinical experience is denied them by the necessity for withdrawing patients from the observation of the public. They are thus almost entirely without guides of their own, and in consequence they come to lean more heavily on the doctor. The strain and responsibility for error thus cast on us would be intolerable were there only the two eventualities of absolute recovery and absolute loss of mind; but, fortunately, there are many stages to fill up the huge gap between these two extremes, stages of partial recovery which allow of the restoration of the patient to various degrees of liberty and usefulness in the world. It is not too much to say that the problem of the future of the patient has to be faced never less often, generally more frequently, than that of treatment.

To prognosis, therefore, much attention has been paid in treatises systematic and clinical, and in detached papers, such

as the able one of Dr. Thomson, which appeared in the "Journal of Mental Science" of 1882. The author of the latter rightly states that general rules of prognosis are arrived at from statistics, plus the results of individual cases. I venture to add that the results of these general rules have further to be refined and adapted to practice in detail, by a close study of each case that refuses to conform to rule, and that a knowledge of what is normal must be complemented by experience gained from a search for the causes of abnormality. Such search into each case is most instructive, and tends to lift experience into a far higher sphere than that of a mere knowledge of figures. Prognosis, as a term, covers a large field, too large for the present purpose, and, therefore, it must be limited by cutting off all consideration of cases before they come to, and after they leave, the asylum. I shall deal only with what we are called upon to say about the prospects of those patients that we have under our charge as medical superintendents. Further, my object is to draw attention to some of what appear to me to be the principal causes of erroneous prognosis, and to illustrate them by cases as well as I can; and I shall assume that the errors do not arise from carelessness or bungling, but are such as everyone might be expected to fall into blamelessly.

If we take 100 cases consecutively, whether of all classes indiscriminately, or of some selected class, we know by statistics that a certain proportion will recover and that the remainder will not. If, again, we take the same 100 cases, and having made a prognosis of each individual one, follow it to the end, we shall find that our forecasts are not in keeping with the gross results; we shall find that a considerable number that we set down to the credit have passed over to the debit, the balance being made good to some extent by unexpected recoveries. In some cases it is possible to demonstrate a reason for failure, in others it can only be guessed at by analogy with these successful demonstrations, while in the remainder neither demonstration nor analogy will afford a clue.

To bring as much order as possible into the treatment of such a wide subject, I shall follow the course of a case, commencing with the history and tracing it onwards; for in every stage there are opportunities for the introduction of errors, which will contribute materially both to the wrong formation and the non-fulfilment of prognosis.

The history-stage of a case abounds with pitfalls, so much so that one is never surprised at some untoward and hitherto unknown fact turning up in the course of it, which would obviously have modified the opinion formed at the outset. We have to contend with intentional suppression, misappreciation, forgetfulness of, and non-acquaintance with, material facts; we are never sure what more is behind that which is told us, and we have to place a liberal discount on most statements.

Hereditary predisposition is peculiarly open to these difficulties. But very few relatives have either the moral courage or the necessary knowledge to fully supply what is admittedly a most important item. We know from statistics that heredity by itself is slightly in favour of recovery from any first, second, or even third attacks; but we also know from experience and reasoning that on the closeness or directness of that predisposition much depends, and that in doubtful cases the scale would be turned the wrong way, in our opinion, by a knowledge that a parent had laboured under insanity, while we might not take much notice of an insane cousin.

Some time ago a young lady, particularly bright and intelligent, consulted me about her brother. I asked the prescribed question as to heredity, and, as usual, I was told that she knew of none, and that she wondered where it could have come from. In the course of further conversation on indifferent subjects, she quite artlessly told me that their father had committed suicide abroad; but the act was due, she said, to a fever from which he had suffered. Further questioning convinced me that he had suffered from melancholia as well. The patient himself was paralytic, though only 30 years of age. As from a distinct history of syphilis and a blow on the head, it was possible that the insanity was acquired, the case, though grave, was not without hope on its own merits; but the history as revealed, adding predisposition to acquisition, reduced the hope to a minimum, which the subsequent course has justified.

More important than mere directness is a history of the actual existence of insanity in either parent at the time of the procreation of the patient. It is difficult to arrive at this knowledge, but when it has been obtained it is of great value. In a case of the insanity of adolescence, in which form heredity is an usual factor, while close heredity is a grave element, I was told that there was no predisposition.

From the course of the case, I was for a time quite hopeful of recovery, but further on it became known to me that at the time of the conception of the patient the very parent who had given me the history had been "peculiar," and had several epileptic fits. The real nature of the affection, which was only of short duration, was never realized by my informant, and it was brought to my knowledge by accident. But it completely reversed my opinion, and the patient died insane.

I have lately been able to work out a family history, which, as usual, notwithstanding its importance, was concealed from me at first. As it is interesting from other points of view beyond the one that I am dealing with now, I give it at some length. The patient is a lady, 58 years of age; a suicidal, querulous melancholiac, who has at times been violent and has given much trouble. Her father was an only child. He drank hard, and died of apoplexy; aged 65. The paternal grandfather died of softening of the brain, and this grandfather's brothers were fast and rackety, one committing suicide while insane. We get three elements of predisposition here: one indirect of insanity, the other two —drink, and neuroses other than insanity—more direct. The patient's mother was also an only child, as, indeed, was the mother's mother. There was consumption in the mother's family, though she was not phthisical herself. Here was a fourth element to start with. The father and mother, being both only children, proceeded to restore the balance by having 17 themselves, two of whom were stillborn, the patient being the youngest of all. In these 15 living children the drink-element showed itself in six of the seven sons; the tendency to neurosis declared itself by two sons dying with paralysis, one facial, the other creeping; while the consumption was carried on in three of the daughters, the patient herself being phthisical. But all the elder 14 escaped the insanity, and it seemed as if our patient would also have escaped. In her case, however, fresh *direct* predisposition came into play; for while she was *in utero*, her mother, being 47 years of age, became seriously insane, having homicidal impulses and pyromania, though after some years she recovered, and died sane. It is possible that the patient might have followed her mother's footsteps to recovery, were it not for the difference in their respective gestations, and the opinion that I formed turned mostly on that. I should add that though the 14 brothers and sisters have all

themselves escaped the indirect predisposition to insanity, yet it has reasserted itself in their children, two of whom are insane. Yet, again, the tendency to extinction of the race, shown by the father, mother, and grandmother being only children, retarded, as it was for the time, by the numerous family, comes to the front again in the next generation, for of the 11 who married there have only 28 children been born, and of these no less than 18 are already dead.

Hardly second in importance to the history of heredity is that of a *group including the temperament, disposition, instincts, and habits* of the patient as he was before he became insane. Correct information as to this is very essential in making a prognosis; not only as supplying often a key to the causation and nature of the attack, but as also affording some means of estimating how far the brain mischief has gone. And, again, it is often of service in judging as to how far recovery has taken place. It is very hard to get this information truly; for relatives frequently fail to see important points that are patent to all others, and they are prone to suppress, minimise, or explain away what is disagreeable to themselves. For instance, we may be told, as I have been told, that a man had a sweet disposition, and was never angry unless he was put out, which may have been true; but it may also be the case that the man was for ever being put out by trifles, and was really in a chronic state of ill-temper. Again, we may hear that he has been a model husband and father, while he has been keeping up another establishment in secret.

But in any case we expect to find, and do find, more or less, alteration in many respects when mental trouble comes on. We must not accept the fact of an alteration without looking well beneath the surface to see how far it is real. I use the word alteration rather than change, for what we do find may be less of a real change than an alteration by way of diminution or exaggeration of the previous habit of mind. And this is important; for without going so far as to say that complete change of disposition, etc., is invariably a more hopeful sign than a morbid exaggeration, I will say that it is far less easy to bring back a patient from exaggeration than to lead him to give up what is only a recent acquisition. And I think that reasoning supports this view. Exaggeration can be brought about only by the lessening of control and reflection, and can be remedied only by a corresponding restoration of these, which are just the two ele-

ments that are most wanting when the disease is established. Again, if a patient's disposition has been completely changed, it is probable that this has occurred more or less rapidly: he may have the recollection of a former happy state, with which he can compare his present one. And, still more important, if he can be brought near the edge of the pit into which he has fallen, and be induced to endeavour to extricate himself, he finds sound ground on which to step out. On the other hand, where the insane is merely an exaggeration of the sane habit, the reverse is the case. Most probably considerable time has been taken to effect this; the reflection on the past offers but little help, and the patient has beforehand destroyed that sound foothold without which he cannot hope to drag himself out of his trouble. Alcoholism in ordinary life, and religious insanity in our domain, afford good examples of what I mean. The latter I will therefore take as an illustration.

I have two patients in view. Both have been actively suicidal, and in both religious despair has been the chief element. The first has been brought up from her childhood in the very gloomiest views, in that form of so-called religion which allows the holders of it to ascend to their heaven only over the lost souls of other beings. She herself has been so tinged with this morbid conviction that when misgivings as to her own future safety entered her mind she lost heart, and has gradually tumbled back into that place of torment which, in preparing it for others, she has made a fearful reality for herself.

The second has, during her illness, been more actively suicidal, and more self-accusing than the previous lady. But as the daughter of a clergyman, she has been brought up in a brighter faith, and her trouble, which in itself is a direct change to her, has come more rapidly. She has the recollection of what was previously a happy time, the hope of regaining which affords a healthy stimulus. No one can doubt which of these two has the better chance of recovery.

I have another patient in view, who had paid great attention, so I was told, to religion, and in whose early symptoms were evidences of this. She saw visions, heavenly and the reverse, and she raved Scripture. However, I found out that she had married a clergyman a year or two before, and that her devoutness was then assumed, so really her religion and its manifestations were merely passing elements in, and not factors of, the insanity.

In some cases a direct change of habit, etc., on the invasion of insanity is followed so quickly by restoration, that it appears to be the direct antidote to a previous condition which had become morbid. Such is the case of a lady who for several years past has come to us for about three weeks soon after Easter. She is very advanced in her religious views, praying through Lent, and fasting also in season and out of season. She then breaks down, and has an evanescent, though sharp attack of acute mania, in which she rushes about laughing and chattering, wild as a hawk, and the very reverse of devout. This passes off, and leaves her in her normal condition. I have but little doubt that this is the true medicine, sharp though it be, for the effects of the strain that she puts on herself, and that were it not for these attacks she would probably pass into obstinate melancholia.

Sometimes we are left in ignorance of *previous attacks of insanity*. These have, of course, a considerable bearing on a present attack, giving, as it were, the line of prognosis. But it is a more serious thing not to have information of the *pre-existence of some of the graver bodily diseases*. This remark applies especially to the various neuroses other than insanity.

Some years ago a lady was admitted suffering from melancholia of the ordinary religious type. She was very gloomy, thin and yellow, and had made two serious attempts at suicide. Ordinary treatment improved her, and she seemed to be in a fair way to recovery, her friends being led to believe so. But after getting to a certain point she seemed to become stationary, and remained so for some years. One day she had a severe epileptic seizure, followed shortly by another. Careful inquiry revealed the fact that nine years before, while she was standing on a friend's doorstep, she fell insensible, and must evidently have had an epileptic fit then, though the relatives had never recognised its nature, and had indeed forgotten the fact until it was recalled to their recollection by the later seizure. One or two more fits have followed at lengthened intervals, and the cause of the non-recovery stands declared.

The *causation of an attack* affords quite as many opportunities for error as any of the foregoing. In fact, it is not too much to say that, as regards some of the assignments of cause in the admission papers, we had far better be without them. No assignment is better than a wrong one, so easily can we be put on the wrong track. Without doubt,

unless we have accuracy here, we cannot approach accuracy in forecast. As an instance of this, a gentleman was brought to us in the following condition :—He was gloomy, reserved, and silent, somewhat vacant in expression, with the appearance of being beaten down by trouble. He was obstinate, disinclined to eat or move, quite heedless of the calls of nature, and weak in body. Trouble was given as the cause, and there was a history of a fall on the head. He improved slowly up to a certain point, but never lost his gloom. The prognosis, though guarded, was not altogether a bad one. But in a little time it came to my knowledge that not only had he had the trial of losing his worldly goods, but that he had done so under shameful circumstances. He had the misery of seeing his family brought near to penury by his own misconduct, and was altogether deprived of any hope of being able to rehabilitate them by his future exertions. In my opinion it was just this addition of shame and self-recrimination that made his case a hopeless one.

Having got as near the probable cause as we can, we have to consider both the validity and the nature of it. It is obvious that if a given cause produces mental disturbance out of proportion to its importance, then we must look farther again and expect to find contributing elements such as heredity, mental worry, bodily disease, drink, etc. And we can go so far as to say that an inadequate cause is insufficient in itself to form a foundation of prognosis. But when we do get an adequate and true cause we obtain from it substantial aid. It is to be remembered that a cause does not exhaust itself in the work of developing insanity. It may be destined to last out the patient's existence. For instance, if a person loses a relative, that loss may be very sharp for the time, but in the natural order of things it tends to wear itself out. Again, if a person becomes insane through bankruptcy or loss of money, the same occurs; but there will probably be difficulty in healing up the wound in proportion to the difficulty in remedying the misfortune. But if, as in the last case, the cause be an ever present one, then the chances are much against the patient. I will give an instance of this: A lady came to us labouring under melancholia. There was no particular religious element about the case, the chief symptom being a beaten, cowed condition associated with the digestive derangements usually seen. The history that I had with her was that she had been in-

sane twenty years before, from which she completely recovered, and had been quite well up to forty, her age at the time of admission. It was supposed that she had worried herself into this condition, but no particular cause of worry was suggested. The prognosis was good, and, indeed, she improved a little. Later on I got further information from a private source. It appears that her present husband courted her when she was quite young, and she returned his affection. But her father, evidently with good cause, refused his sanction, and the pair were separated, the lady thereupon becoming insane. Some years afterwards the father died, and she being a free agent, married her former suitor, who held a very good position. But his principles were anything but desirable, and he turned out to be a confirmed drunkard, so much so, that in the midst of comparative opulence it was necessary that she should keep the purse so strictly that he had to come to her for money to get shaved with, for which operation he had not sufficient steadiness himself. Here we have a powerful cause, slow but sure in its action, and quite likely to outlast the patient's chance of getting well. She continued for some time further under our care, but made no more advance to recovery.

The *duration of insanity before admission* has such a well-known influence on prognosis that it is an element that has to be carefully inquired into. It fortunately can be determined with a fair amount of accuracy, though occasionally there is some difficulty in separating the prodromata from the overt symptoms. But one or two cautions are necessary. Firstly, when we consult statistics, such as are afforded by No. VII. of this Society's tables, we see that the duration is calculated up to the admission into the asylum. But in applying these tables to individual cases of our own, we must not render the term admission too strictly. The admission into the asylum may only be a phase in the treatment which has been begun most actively elsewhere. To take a not uncommon case: Last year a young lady was admitted by us who was suffering from acute mania; the duration between her first seizure and her coming to us was six weeks, but within one week of the symptoms showing themselves she was at home under very energetic treatment, with competent advice, consisting of nurses, strong sedatives, restraint, and seclusion. The real duration before treatment was therefore one week, not six. Of course, in such a short case, much difference would not be made, but in a long case of melancholia a con-

siderable misapprehension might arise. Secondly, it is not sufficient to ascertain the duration of the disease as a whole. It is necessary to find out how long symptoms, or sets of symptoms, have existed in relation to each other. This necessity has pressed itself on me recently. A young married lady, who on admission had no very urgent symptoms, had done some foolish and dangerous things, and had therefore to come under care. It was a puerperal case originally, the first symptoms of excitement coming on a few weeks after her child was born. She suffered from severe metritis. The excitement passed off, and she began to regain strength. But she did these silly things, and for no very good reason. It soon appeared to us that she had aural and other hallucinations. The prognosis then very much turned on the question of whether these grave symptoms were part of the acute disease, or whether they had been developed when the acuteness was receding and the bodily health was being re-established. Had the latter been the case, I should unhesitatingly give but a poor opinion. As it is, there is clear evidence that they have been present from the first, and therefore I look on her case much more hopefully.

In the history of the attack itself no very special risk suggests itself to me beyond that of having the mind overloaded by a mass of useless facts. The informants have a great knack of telling one a long story, the whole of which perhaps establishes one real fact only, while valuable information may be thus excluded.

In passing from this division of the subject, I must mention that occasionally a correct history is a source of positive embarrassment. The history may contra-indicate a condition which is sufficiently apparent clinically. As an instance: A patient was with us last year who was clearly a general paralytic, and condemned as such by several competent judges. The leading symptoms were busy activity and great earnestness, much talk of riches and lucrative speculations, dirty habits, somewhat unsteady gait, and marked inequality of the pupils. The speech was not much affected, and there was but slight fibrillar unsteadiness of the tongue. The facial muscles, though unsteady, were not so to the usual extent. He improved, and eventually left us for domestic treatment, under which he continues in a most satisfactory condition. Nevertheless, there is only too much ground for being certain that it is a case of general paralysis, whether it be of syphilitic origin or idiopathic. But the

history does not tally with this at all, for it appears that twenty-five years ago the patient had an undefined attack of mental trouble, which his father, a medical man, feared would go on to insanity then. Again, some four or five years ago he was excited over business matters, and of late years has never been of the same calibre as before. The inequality of the pupils has apparently but little to do with his present disease, for it was noticed years ago, and he has worn glasses of different powers to accommodate this condition. Again, his mental state is only an exaggeration of what it was formerly. He has good right to talk of his riches, which are considerable, and activity in scheming has been his forte and the source of his wealth. His habits, especially of late years, have not been very tidy; he has allowed his food to drop about his clothes, and a long-standing looseness of the bowels has contributed to other sources of uncleanliness. In fact, there is not one of the leading symptoms that can not be traced far back into the past; too far to be consistent with what is accepted to be the ordinary history of the disease.

(*To be continued.*)

Exaltation in Chronic Alcoholism. By Bonville Bradley Fox, M.A., M.D. (Oxon), Brislington House, near Bristol.

(Read before the Medico-Psychological Association, May 6th, 1884.)

During the last four years, as medical officer in an asylum sufficiently populous to offer a fairly wide field for study, but not too large to prevent each individual case from receiving its own share of investigation, no subject has attracted me more than the occurrence of delusions of exaltation and optimism in the Insanity of Chronic Alcoholism. And this mainly for two reasons, viz., the divergence of opinion of good authorities as to the frequency of the association of such ideas with this particular class of insanity, and the difficulty which not seldom attends the accurate recognition of their true character and import. If in this paper I can report the salient features of these cases, they may, perhaps, have an interest to others to whom they present no difficulties in diagnosis; and if the inferences that are drawn from them seem occasionally to deviate from those of writers of experience, it must be remembered that the cases are too few to

admit of any but tentative statements, and that such will be put forward as suggestions and not as dogmas, though at the same time the accuracy of the facts and descriptions from which they are deduced can be guaranteed.

Attention should be drawn at the outset to the fact that the subject of this paper is not Alcoholic Insanity as a whole, but merely one group of symptoms occasionally conspicuous in the course of this disorder, and this generally when it has assumed a chronic form. Within these limits the following remarks will, as far as possible, be restricted, and an attempt will be made to treat of them as distinctly as may be; firstly, as regards the frequency of their occurrence; secondly, as regards their diagnosis and characteristics; thirdly, in relation to their significance, and as aids in prognosis; while, in conclusion, some speculations will be ventured upon as to their origin, and the morbid changes in the organism with which they may be associated.

First as regards *frequency of occurrence.*

On this point considerable divergence is to be found in writers on insanity. Blandford* states distinctly that he "has not found the exalted delusions that characterise general paralysis in patients suffering from chronic alcoholism. . . . Their delusions have been mainly due to the almost complete obliteration of memory;" but at the same time he admits that some cases are almost impossible to decide upon one inspection.

Bucknill and Tuke,† while not denying the occurrence of such exaltation, often combined with paralysis in chronic alcoholics, go on to say, "Such cases may proceed further and become examples of general paralysis, but *in general* the muscular tremors and loss of power (in chronic alcoholism) *without* ideas of grandeur, constitute a group of symptoms quite distinct from this disorder." (The Italics are mine.)

Griesinger,‡ on the other hand, admits the occurrence of exaltation in the insanity of alcohol, and draws attention to the fact that the diagnosis between it and general paralysis is not very easy, citing as authorities on the same side Lasègue and Bayle, who have made the subject a special study.

Dr. Batty Tuke, in a paper published in the "Edinburgh Medical Journal," for April, 1877, lays great stress upon the

* "Insanity and its Treatment." 2nd Edition, p. 288.
† Bucknill and Tuke's "Psychological Medicine." 4th Edition, p. 393.
‡ "Mental Pathology and Therapeutics," translated from the German, p. 403.

frequency of the occurrence of ideas of grandeur, and of the feeling of *bien-être,* often in combination with motorial and sensorial derangements, in the victims of chronic alcoholism, and adduces various instances to show how difficult it sometimes is to distinguish this disease from general paralysis, and how in some patients this can be done only by watching the course of the case.

My own experience, and the investigation of the case-books of this asylum, certainly suggest that optimism and exaltation are to be found very frequently indeed in chronic alcoholism, or rather, to be more precise, in the chronic insanity of alcoholism, and occasionally, though rarely, in its earlier and more acute phase. During the last 13 years, 18 patients have been admitted into Brislington House labouring under one form or other of alcoholic insanity, all of them cases in which the disease was clearly due to intemperance. Of these 18, 7 displayed very exaggerated delusions of grandeur and importance; 3 others that placid contentment and satisfaction with themselves and their surroundings which are closely allied to the foregoing, and often are their vestiges when all ideas appear to have vanished, and the mental faculties no longer possess even an erratic and distorted activity, but are overwhelmed and lost in the desert of dementia, the frequent termination of continuous alcoholic poisoning. Thus in 10 out of 18, or in more than fifty per cent. of a fair number of cases of alcoholism in patients of the upper class, and as it happens, with one exception, all of the male sex, these delusions appeared in greater or less degree; and it should be remarked that of these 10 only 1 was a recent case, and this, though of but three days' duration, was a second attack.*

Secondly—*Characteristics and Symptoms.*

It may be both simpler and clearer at once to give an epitome of the cases of alcoholic insanity in which these ideas occurred, before proceeding to describe their characteristics, and the means whereby such cases are to be identified and distinguished from other varieties of insanity, in which similar exalted delusions predominate.

Case I.—J. O. M., a male, æt. 27. Admitted June, 1871. Second attack of three days' duration—loquacious and irritable.

* Of these 18, 7 ended in recovery. Their insanity took the form of the mania of suspicion and persecution in 4; of melancholia with suicidal tendencies in 3; and of exaltation in 1.

Says that he is God Almighty and king ; also Mr. Gladstone and the Prince of Wales. Bodily powers good. No sign of paralysis.

Recovered in ten weeks.

Case II.—S. W., a male, æt. 88. Admitted May, 1872. Second attack of seven weeks' duration. Has been a hard drinker for many years. Is irritable and impulsive, but generally very contented. Says "he has palaces in the New Forest and at Winchester, and that all England is his; that he owns quantities of carriages and horses, and can ennoble anybody, or, if he chooses, kill anyone by breathing on them." Believes this asylum to be Buckingham Palace. Physical powers fair.

Discharged not improved in two months' time.

Case III.—K., a male, æt. 50. Admitted May, 1875. First attack, of at least one year's duration. Has drunk for years, and had D.T. Marked heredity. Cachectic appearance. Chronic gastritis. Pupils sluggish, right more so than left. Paretic debility of lower extremities. Utterance slow, at times impeded. No tremor of tongue, or of muscles generally. Impulsive if contradicted. Complete loss of memory for recent events ; recollection does not serve him for ten minutes. For some years after admission thought he was a physician, and had two stomachs, one inserted per anum after having been taken from a corpse ; but in the fourth year of residence here these entirely disappeared and were forgotten, and were replaced by ideas of grandeur, which have never since varied, and are expressed in exactly the same words every day, and in rhyme, constituting a good instance of "rhyming delirium" (Griesinger). For example, he states that the following gift and blessing has been pronounced on him from Heaven :—

> The whole world, a wife, and never to die,
> These three things from the Trinity ;
> To stop in my world till my unborn son
> By my unseen wife is twenty-one.

Says that he is king and owner of the world, and therefore that all that he can see is his, but at the same time asks for certain pictures, and other articles of trifling value, to be given to him. Is perfectly happy and satisfied, and says he must be well as he is never to die ; but in the next breath demands brandy, as "quite lately all food comes up without brandy; though formerly the most temperate man in the whole world, it has suddenly become a necessity."

At the present time his physical powers are rather feeble, but with no definite paralysis, and are no worse than on admission nine years ago. His utterance is clearer, but he is otherwise *in statu quo*.

Case IV.—C. H. C., æt. 31, a male. Admitted October, 1871. First attack of four days' duration, but has had D.T., and has drunk for years. At first he suffered from the mania of suspicion and persecution, goaded by which, and by terrifying hallucinations, he had cut his throat, and arrived here extremely collapsed and anæmic. His

bodily powers were otherwise perfect, and now are very good. This mental condition continued for nine months, then gradually ideas of exaltation appeared, which absorbed all others. Now believes that he is engaged to the Princess Beatrice. That he is king of England. That "he has died and risen again after having been crucified at Jerusalem, and is now Salvator Mundi, King of Kings, Lord of Lords, and an Immortality, possessing the Sacred Heart inside him." Not serenely contented as he wants to join the Princess, and is constantly trying to make his escape. Very impulsive and dangerous. Memory bad, and getting worse. Hears "voices." Continued headache, and congestion of face. No sign of paralysis.

Case V.—C. T. C., a male, æt. 44. Admitted March, 1869. First attack of at least one year's duration. Has drunk for years. On arriving craved for sherry. At first delusions of persecution and conspiracy, but these were soon submerged in exaltation. Says that he is descendant and heir to the Plantagenets, and related to the Queen through the Lord of the Isles. That he has thirteen peerages, and is at the same time Duke of Rothesay, Marquis of Lothian, Earl of Baltimore, and Baron Glenbay. Is at once King of the Two Sicilies, the Pope and the Sultan, and has been eighteen times Lord Chancellor. Is worth £500,000 a year. Believes this asylum to be the Herald's College, and his property. Suffers from hallucinations of hearing. Memory defective. Very good-tempered and happy. Extremely obese, but no paralysis. Delusions never varied for twelve years, when he died of cerebral hæmorrhage.

Case VI.—W. S. R., a male, æt. 48. Admitted October, 1880. Second attack of long standing, as are the habits of intemperance. Conspicuous heredity. Mother died of abscess of brain, father of drink; aunt, cousin, and grandmother also intemperate. *Said* to have had a stroke of paralysis and D.T.

Appearance prematurely aged, shrunken, and stooping. Tremor on exertion of hands and fingers, to less extent of tongue. Speech drawling. Gait somewhat slow and halting. Pupils equal. Exaltation commenced about five years before admission, and has continued unchanged in expression. Says that he is the eldest son of the Queen and the Heir Apparent, and is going to do all sorts of grand things when he ascends the throne, to which the Prince of Wales has acknowledged his right. That Prince Leopold has given him a carriage and horses. That he has only to ask the Government for money to get it. Memory unreliable. Perfectly contented and happy, and extremely patient and good tempered. Getting more weak-minded now.

Case VII.—W. B., a male, æt. 60. Admitted April, 1878. First attack of several months' duration. Drinking habits of some standing. Hereditary taint. Considerable muscular tremor; feeble, shuffling gait; tongue tremulous; utterance indistinct, the words run into one another. Pupils contracted and sluggish; sight good.

Decided impairment of sensation, especially in the lower extremities. Emaciating rapidly. Destructive and dirty in his habits, strips off his clothes; smears his body with his fæces, which he declares to be the ointment of life. Says that he is King of England and Emperor of the world, and Jesus Christ. That Prince Albert was the second person of the Trinity, and himself the third. That he is worth 100 millions. Has appointed one of the staff physicians royal with a salary of £10,000 per annum. Shall pay off the National Debt. Can give eternal life by transfusion of blood. That revelations are made to him. (Hallucinations of hearing.) Is irritable, abusive, and emotional, occasionally bursting into tears. His delusions have developed, and varied from time to time, but have always maintained their extravagant character. Says he is very well and happy, and is in a state of "overflowing contentment." At the present date his memory has almost gone, and his mind is altogether far sunk in dementia, but he "still attempts vaguely to establish a great omnipresence, to show that he is everything, which, indeed, is in accordance with his exalted state of mind" (Griesinger). His bodily powers are at least as good as on admission.

These cases have been detailed at some length, because it was thought desirable that the physical and mental points of resemblance and difference between them and those occurring in other forms of insanity should, if possible, be brought out. In attempting to draw such distinction their characteristics must incidentally be discussed, and will not, therefore, be noticed more particularly by themselves.

It may be stated broadly that there is no form of delusion common to a greater number of clinical varieties of insanity than are these of exaltation. They are to be found in general paralysis, in epileptic insanity, in that of masturbation, in chronic mania not owning an alcoholic origin (and this more frequently when its subjects are governesses, and persons in similar positions), and in chronic alcoholism. Everyone would assent to the truth of Dr. Blandford's * words in the new "Dictionary of Medicine," that "Accuracy of diagnosis is specially important in insanity owing to the legal and social results which flow from it;" and, this being so, it is not a little astonishing to find that from the opinions with which patients arrive at the asylums, there are at least some practitioners who appear to imagine that exaltation at once marks the general paralytic, more particularly if there is actual or threatening physical degeneration. That an accurate opinion is sometimes very difficult—nay, almost impossible—to form, it would be absurd to deny; and for other

* Quain's "Dictionary of Medicine." Article, "Insanity," p. 715.

reasons than that of mortal fallibility. The cases recorded by Dr. Batty Tuke are alone sufficient proof of this, and within the last three years a Commission of Lunacy has been held, at which four medical men, all of them of considerable experience in lunacy, expressed their opinions, more or less strongly, that the subject of the inquiry was a general paralytic in an early stage of the disease, an opinion that has been entirely refuted by the subsequent course of the case.

Before entering upon the points of resemblance and divergence between chronic alcoholism and general paralysis, the exaltation of the insanities of epilepsy and masturbation may be dismissed in a few words.

In epileptic insanity the exaltation is often paroxysmal. There is not a fixed, stationary delusion that never varies, though the same delusion may be reproduced again and again at intervals. It more commonly, too, takes a "religious" or "spiritual" tone. There is probably a history of petit mal or haut mal, and possibly an increase in the number of the fits at the time of the mental disturbance. The mental and bodily powers surely, if slowly, decay, and in most cases there is little resemblance between the epileptic and chronic alcoholic by the time that middle life is reached. It must not be forgotten, however, that alcoholic excess and its concomitants not unfrequently produce epilepsy, and that epileptic fits occur in alcoholic insanity, and did indeed take place in two of the seven cases that were noted before to have lately recovered in this asylum.

In the insanity of masturbation memory may be weakened, but the exaltation is usually an exaggerated development of spiritual pride, self-complacency, and perfect satisfaction as to prospects in futurity rather than the wild fantasies of chronic alcoholism. Hypochondriasis rather than a feeling of *bien-être* is more frequently present. The youth of the patient, and his languid, debilitated appearance, will generally suggest the cause of the symptoms, and be sufficient guide, even if the history and plainer evidence are wanting. One point of distinction of many may be noticed in the appetite, generally poor in the alcoholic, often ravenous in the masturbator. But there is really no likelihood of confusion between these two varieties.

Before attempting to draw any comparison between the exaltation of the chronic alcoholic and that of the general paralytic it may simplify matters if, from the narration of

the above seven cases, any symptoms can be found common to all, or occurring in a sufficiently large proportion to make them characteristic of this class of insanity.

The age of the patients is worthy of notice. In only two was it below 31, and one of these recovered. In the others the ages were respectively 44, 48, 50, 58, and 60.

The exaltation and feeling of well-being is usually not developed until the insanity has been marked for some time, but once decidedly pronounced, is stationary. The delusions are repeated from day to day, are fixed, constant, and ineradicable, unless disappearing in the terminal stage of dementia. There are no lucid periods in which they are forgotten and repudiated. As a rule they are not accompanied by much emotional instability, but rather by a placid calm. There are not often times of depression, gusts of weeping, or storms of mania, in which destructiveness and dirtiness predominate. Dr. Sibbald,* in "Quain's Dictionary," mentions persistent mental depression as distinguishing chronic alcoholism from general paralysis. I can only say it was conspicuous by its absence in the cases before mentioned.

There is sometimes considerable tremor and some paresis, but under proper treatment these symptoms do not increase, and may altogether subside.

The bodily health of the patient is usually well maintained, or deteriorates but very gradually.

The foregoing statements appear to be true of the majority of such cases, and were they constant, and did the signs of paralysis never vary, there would be little difficulty in discriminating between the two disorders.

Thus we find that the victims of general paralysis are generally younger than those of chronic alcoholism, and the exaltation appears earlier in the former than in the latter.

In general paralysis the delusions often vary daily. Though maintaining their exaggerated character, their expression and development differ, and the assertions of one day are denied on the next. This is very unusual in chronic alcoholism. In general paralysis there not uncommonly occur remissions, in which all or most delusions vanish, and it seems as if the patient were recovering. In other cases the exaltation is interrupted by emotional conditions of intense despondency, often with passionate weeping, which may give place to as furious mania, in which everything within reach

* Quain's "Dictionary of Medicine." Article, "Alcoholic Insanity," p. 723.

is destroyed. This phenomenon is very rare in chronic alcoholism, though it was visible in Case VII.

Tremor, paralysis, and other physical signs, as a rule, tend to increase, and to terminate before many years in death.

But the above points of distinction, though useful aids in diagnosis, must sometimes prove quite insufficient and valueless, chiefly for two reasons—

(1) They presuppose that the physician is furnished with a fair history of the patient, and has the opportunity of observing him for some time, whereas it often happens that we are asked to give a definite opinion on a patient seen for the first time, whose history may be very incompletely or inaccurately furnished by his friends.

(2) The symptoms of general paralysis vary very considerably. When far advanced the disorder is easily recognised, but in the earlier stages the difficulty of an assured diagnosis is often extreme.

Are there, therefore, any other mental or physical signs by which the two diseases may be distinguished?

Taking mental symptoms into consideration first of all.

Dr. Blandford * lays considerable stress upon the following points as pathognomonic of general paralysis :—

(1) The general paralytic cannot argue in defence of, or attempt rationally to account for, his delusions, but, on the other hand, several of the subjects of the preceding cases equally fail to do so.

(2) The exaltation of general paralysis is less reasonable, and more inconsistent than that of other kinds of insanity. "An ordinary maniac may think himself a duke, or may purchase a carriage and horses which he cannot pay for, but a paralytic that he is a duke, marquis, and king all at once," &c. This, no doubt, holds good in many cases, but that it has not sufficiently universal application to constitute a law reference to Cases I., III., IV., V., and VII. will prove.

(3) Impairment or loss of memory is very common in general paralysis. But it appears to be almost equally so in chronic alcoholism.

(4) Emotional storms, while very common in general paralysis, are very rare in chronic alcoholism, but not absolutely unknown. (See Case VII.)

The conclusion, therefore, appears inevitable that there is no mental symptom whereby the exaltation of alcoholism

* "Insanity and its Treatment." 2nd Edition, p. 268, *et. seq.*

can be distinguished with absolute certainty from that of general paralysis.

Are physical signs of more avail?

These are in general paralysis —

(1) Tremor of tongue and other muscles; most certainly found also in chronic alcoholism. (Cases VI. and VII.)

(2) Slurring of speech. (Seen also in Cases III., VI., and markedly in VII.)

(3) Weakening or paresis of the whole or parts of the muscular system. (Seen also in Cases III., VI., and markedly in VII.)

(4) Contraction or irregularity of pupils, on which Dr. Batty Tuke lays much stress. But this is by no means constant in general paralysis, though very common, and is certainly not confined to it, occurring in other forms of insanity, and in some degree in chronic alcoholism. (See Cases III. and VII.) It must also be remembered that inequality of pupils exists in some individuals in perfect health. It may be remarked that in none of the cases of alcoholic insanity quoted above has there been any appearance of alcoholic amblyopia.

If the patient can be watched for some time, there will, I think, be found one point of physical difference between these two diseases. From the few observations I have hitherto made, I am led to suspect that the temperature of alcoholic patients is usually lower, and not subject to as wide fluctuations as it is in general paralysis. And another point of physical distinction exists in the sensory paralysis, which is frequent in chronic alcoholism as compared with general paralysis, in which it is rare, though not absolutely unknown.

The habits of alcoholics contrast favourably with those of paralytics as a rule, for it is a matter of daily asylum experience how soon and how persistently wet and dirty these latter patients become, either from relaxation and loss of power of sphincters, or from being too imbecile to exercise any care of themselves in this respect, or from both causes combined.

I hope from the foregoing remarks that it has been made clear to some extent that neither are the mental or physical signs usually ascribed to general paralysis—viz., the exaltation and forgetfulness, associated with tremor, muscular weakening, and alteration of pupils, either singly or even in combination—absolutely pathognomonic of that

disease, or quite trustworthy. They will all be found in Case VII., which, I venture to think, could be accurately diagnosed only by watching the course it has taken, by the gradually increasing paralysis of mental power without any corresponding physical decay during several years.

The age of the patient is no doubt a point of considerable importance, but cases must not unfrequently occur to us in which we must decline to be guided by apparently unmistakable signs, and in which our decision should be reserved until a full and accurate history of the patient and his malady has been supplied. And there are some rare instances in which our opinion should still be withheld until the case has been for some time under careful observation.

With regard to the *significance* of such delusions and their *bearing on prognosis*, it is beyond doubt most unfavourable. Reference to the foregoing narrative shows that of the 18 cases of chronic alcoholism on which this paper is founded, in only seven did recovery take place, and of these seven but one was characterised by exaltation, and this of comparatively brief duration—little more than a month. Of the 11 who did not recover, and of whose recovery there appears to be now no probability, in no less than nine did these ideas show themselves to greater or less degree. This disproportion is too large to be merely accidental, and leads to the conclusion that when once exaltation is firmly established there is little hope of much mental improvement, almost none of complete restoration. It would be a mistake to speak too absolutely, or to leave other considerations out of the question, such as the duration of the delusions, and the concurrence with them of loss of memory, and other indications of intellectual decay; but the statement as to the ominous significance of exaltation will be found generally true. I cannot do better than quote the opinion of Griesinger* on the subject, both from the high authority with which he speaks, and because my short and narrow experience precisely accords with his. He says—"As soon as such a condition (*i.e.*, exaltation) accompanied by delirious conceptions arising from inordinate self-conceit, has in any degree become fixed, there is founded a state of mental derangement infinitely more serious than that of simple mania. . . . Delirious conceptions, false ideas, which arise from over-estimation of

* "Mental Pathology and Therapeutics," p. 274. He is speaking of "Monomania."

self, and therefore relate only to the special self of the patient, appear, which immediately involve the *ego* itself, and therefore the innermost part of the individuality becomes alienated and falsified." And again—* "A completely fixed exalted delusion, when it has continued for more than half a year, is not easily got rid of; nevertheless, cases sometimes occur where the monomania gradually disappears after it has lasted for several years: when this occurs *other morbid processes* are generally developed. All symptoms of commencing mental weakness, loss of memory, recurrence of incoherence, &c., indicate that the patient is becoming incurable."

Drs. Bucknill and Tuke† state that the prognosis of insanity characterized by exaltation is unfavourable, and also that caused by alcoholism. Very unfavourable, therefore, must be the insanity due to alcohol, and exhibited in exaltation. Other writers express themselves to the same effect, and there is indeed a general consensus of opinion on this part of the subject.

Pathology.—The precise pathological conditions which determine this state of exaltation are, to some extent, matters of conjecture. We know the action of alcohol on the vasomotor system, and we believe that it has a special affinity for, and directly injurious influence on, the nervous tissue, so that its evil effects on the brain are double, one direct, the other indirect, through its alteration in the vascular supply. It differs too from opium, belladonna, and other poisons affecting the nervous system, in that its effects remain after its administration has ceased.

Professor Curnow‡ has lately stated broadly that the "autopsy in alcoholic insanity discloses no specific characters," and this no doubt is the fact, in so far that it would be impossible to identify this particular species of insanity by mere post-mortem examination. But there are certain appearances which are usually to be discovered, though they are not confined to the subjects of the insanity of intemperance. They consist of signs of present or past cerebral hyperæmia.

Even apart from actual anatomical demonstration, the analogies of other conditions of expansiveness and exaltation, in which the pathology is less obscure, would strongly point to hyperæmia. In epilepsy and general paralysis, more particularly in the latter, cerebral congestion is plainly shown

* Griesinger, *op. cit.*, p. 310.
† "Psychological Medicine." 4th Edition, p. 137.
‡ Quain's "Dictionary of Medicine." Article "Alcoholism," p. 28.

both before and after death, and though this *may* not be so in the insanity of masturbation, it can hardly be doubted that the frequent intense stimulation to which the victims of this degrading habit expose their brains, a stimulation whose effect is expressed in an organic convulsion, presupposes corresponding convulsion or excitement of nerve-cells, and at the time being at least involves an increase of blood-supply to those cells, and to the brain generally. Again, in the early stage of drunkenness, when ideas flow with increased rapidity, and a feeling of expansiveness and well-being takes possession of the individual, there is a determination of blood to the head.

It is worth noting that these transient hyperæmias, viz., that of drunkenness and that of too frequent sexual excitement, which may be associated at first with nothing more than molecular disturbance, by repetition occasionally lead to coarser and more permanent changes in the brain, of which one result is general paralysis. And when the congestion of habitual drunkenness fails to effect this, and merely vitiates the mental health without destroying the life of the individual, it is not surprising that those sensations, which resulted from the first poisoning of the cerebral tissue, should remain, when that poison is withdrawn. This is expressed more clearly by Dr. Maudsley.* "Temporary irregularities in the supply of blood to the supreme centres may, and often do, pass away without leaving any ill consequences behind them; but when they recur frequently, and become more lasting, their disappearance is by no means the disappearance of the entire evil; the effect has become a cause, which continues in action after the original cause has been removed, and permanent mental disorder may be thus established. *Once the habit of morbid action is fixed in a part, it continues as naturally as, under better auspices, the normal physiological action.*" And he proceeds to point out the close analogy between the phases of drunkenness and of chronic insanity, and shows that as in the former the expansiveness and excitement pass into stupor, so, in the latter, the distraught activity of the brain, as displayed by fantastic delusions, often lapses, and becomes dulled for ever in dementia. This is the natural end of many of such cases, and in connection with the varied and wild ideas which mark the period preceding that in which almost all ideas vanish, Claud Bernard's observation is appropriate, that "when a histological

* "The Pathology of Mind." 3rd Edition, p. 192.

element dies or tends to die, its irritability augments before it is diminished."

Admitting then, as is doubtless true, that cerebral hyperæmia is the original basis of these delusions of exaltation, it is not difficult to understand why they can be so rarely removed, associated as they are with permanent organic lesions in the brain. To quote Griesinger* once more—"Cerebral hyperæmias may occasion the development of exudations and their further transformations. The more the disease is prolonged the less it is interrupted by lucid intervals and remissions, and the more intense the hyperæmia the more are these exudations to be feared."

It may be pointed out that, apart from the mental disturbance caused by habitual abuse of alcohol, it sometimes bequeaths certain permanent physical derangements, identical with those seen in temporary intoxication, viz., impairment of co-ordination, blunting of cutaneous sensibility, and, as I think, permanent reduction of temperature from injury to the vaso-motor system.

The *treatment* applicable to persons labouring under these delusions of exaltation may be very briefly dismissed. If the foregoing statements are correct, it is at once apparent that little can be done for them; certainly we cannot hope to rid them of their false ideas by any argument or train of reasoning. Their physical health often requires attention; their bad habits should be checked, and the gastritis or other diseases induced by their course of life, as far as possible alleviated. All stimulants should be cut off, or administered sparingly, and much diluted. I have never seen any ill effects accrue from this last step, and have occasionally noticed considerable improvement. I am aware that the total withdrawal of accustomed stimulants is considered to be too drastic a measure by some authorities, but as Mr. Holmes† points out, when speaking of delirium tremens, there is no ground of reason, or therapeutical experience, to lead one to expect a cessation of the effect from a continuance of the very irritation which produced it.

It is necessary to place such patients under certificates of lunacy, otherwise they cannot be legally and properly restrained from indulgence in drink, and from the wild and ruinous schemes to which their inordinate self-esteem and

* "Mental Pathology and Therapeutics," p. 92.
† "Surgery, its Principles and Practice," p. 61.

vanity prompt them. And while the control of an asylum is not absolutely indispensable, it offers the advantages of healthy routine and safe protection for the patient from himself and his bad habits, which he will probably cease to attempt to gratify when he perceives that attempt to be hopeless, while at the same time his happy frame of mind will prevent his regarding such a position as a painful one.

In conclusion, to briefly summarize the propositions of this paper:—

1. The insanity of chronic alcoholism is very frequently characterised by exaltation.

2. But these exalted delusions are common to various types of insanity, and are not therefore reliable as determining classification.

3. This exaltation in some cases possesses nothing to distinguish it from that of general paralysis. Occasionally, too, the physical signs of the two diseases so far resemble one another that they can only be differentiated by the history and other circumstances connected with the case, and in some rare instances, only by watching the course of the malady.

4. In chronic alcoholism delusions of exaltation are usually fixed, constant, and ineradicable.

5. This is in consequence of their dependence upon cerebral changes, the result of repeated hyperæmia.

6. Little or nothing can be done for their removal.

CLINICAL NOTES AND CASES.

Unexpected Recoveries. Two cases contributed by Dr. Willett, Wyke House Asylum, Isleworth.

Case I.—A. B., aged 30. Admitted June 29th, 1852.

There was some remote family history of mental disease, but this was patient's first attack, and all near relations are quite healthy.

Present illness came on suddenly, and when in otherwise good health, seven months previous to admission. It was undoubtedly caused by overwork and anxiety, the entire burden of a large London parish devolving unexpectedly upon him. Patient became oppressed by the idea that he was not doing his duty, and so worked harder until the brain gave way, and delusions respecting sin and the Evil One took possession of him. He felt he was lost eternally, became careless as to his appearance, slovenly in his habits, and at one time

exhibited suicidal tendencies. Patient's brother, a medical man, now took charge of him, and though they travelled together and everything possible was done to divert his attention from his delusions and to keep him amused, no change for the better occurred in his mental condition.

On admission patient was not in good health, several pustules being present on the hands and elsewhere, which were being constantly irritated by picking. He was a very fair man, with a narrow forehead, the head widening greatly behind. His attitude was illustrative of deep melancholy, but he could be roused, and would sometimes break out singing or whistling. He took no care for his appearance, and was very slovenly. Would sit for hours in the same position, and seemed only anxious to be left to himself; indeed, he sometimes showed great irritability when attempts were made to rouse him. He had many strange delusions—that the devil had possession of him; that he had lost his voice and could not preach; that he had murdered many people; that various animals, such as the birds in the aviary and the cows in the field, were his relations. He sometimes said he was dead, and that the asylum was Hades. He always objected to taking the usual exercise, and to have his bath.

Patient continued much the same until about the middle of August, when his condition appeared to be changing for the worse, and it was feared that he would pass into a state of dementia. He began to refuse his food, became dirty, and went about with his clothes undone. His favourite attitude was to sit with hands in pockets, head bent on chest, and legs extended in front of him, the eyes being kept closed.

Sept. 2nd.—No change, but burst out crying on his father and brothers visiting him.

Sept. 30th.—Relations, on again calling to see him, expressed it as their opinion that patient was no better.

Oct. 2nd.—Has been induced to play the cornet once or twice. Appears a little brighter, and is to take his meals with the more rational class of patients. At this period an old friend of the patient, also a clergyman, called upon him, and the two had a long talk together, during which his delusions were not referred to. This conversation, indeed, seems to have been the turning-point from which his recovery dates. Patient afterwards told me that he felt ashamed that his friend should see him in such a state, and he resolved to "pull himself together."

Oct. 4th.—Is much more lively. Has walked out with the Assistant Medical Officer, which he had always previously declined to do; and he then stated that many of his late impressions he felt to have been "in great measure delusions."

Oct. 7th.—Wished to be shaved and to take daily walks. This he now does, and on such occasions talks almost constantly of his state of mind of late, and laughs at his old delusions.

Oct. 10th.—After a rather exciting day, during which he had

played billiards, written several letters, sung a few songs, and been for a long walk, he was restless at night, could not sleep, and said some of his old fancies were returning. A draught of chloral and bromide of potash was given. Patient then slept, and awoke as well as ever. However, he was forbidden for the present to write many letters or excite himself with the visits of friends. This course appeared to irritate him much, and he sometimes used bad language in consequence. This he never used to do when in perfect health.

Oct. 25th.—Patient's friends now say he is as well as ever he was in his life. He consequently left on a two months' leave, and was discharged, cured, on Dec. 25th, after an illness of 12 months.

Case II.—C. D. Admitted April 22nd, 1856. Æt. 20.

Presented the appearance of ordinary dementia. Was unable to perform the most trivial offices for himself, was extremely dirty in his habits, and inattentive to the calls of nature. By the following June he had so far recovered that he would converse, though foolishly, attended to his own wants, and was again cleanly in all respects.

In May, 1857, there is a note made of an attack of acute mania, previous to which, the report says, he had been getting thinner; and on June 4th of the same year the first mention is made of his habit of masturbation, which appears to afford the key-note to this case. Thus an entry occurs, dated April, 1858, in which another attack of acute mania seems to have been traced to this practice as a cause; and again, on Nov. 27th, mention is made of this habit of self-abuse, and is followed by a notice on the ensuing day of a fit of violent excitement and screaming. In addition, it may be mentioned that running continuously through the report is the fact of frequent costiveness noticed, though plenty of exercise was always taken and the diet an ordinary one.

These more or less acute paroxysms of maniacal excitement occurred at intervals during the following years, until the following note occurs, dated Sept., 1882:—"Attendants say Mr. W. masturbates frequently every night. Patient looks pale and ill." At this time, too, mention is first made of a complaint on his part of a "feeling of soreness and stiffness in the stomach." Bowels then much confined.

On examination, Oct. 11th, the pain and tenderness were found to be localized chiefly in the right iliac fossa, though the abdomen was generally distended and tender on pressure. In the inguinal region, on very slight pressure patient called out loudly, and then complained of feeling sick and faint. A small soft tumour was discovered at the upper part of the right inguinal canal, and as the scrotum was found empty, and, indeed, undeveloped on the same side, the diagnosis was made of undescended testicle incarcerated in the inguinal canal.

It may be mentioned that the symptoms at this time, as well as in subsequent attacks of a similar character when vomiting was also present, very closely resembled those of hernia. The apparent obstruc-

tion of the bowels (no motion was passed for four days), the sickness and tumid belly, together with the anxious expression of countenance and dorsal decubitus, all pointed to that possibility.

These attacks of congestion and inflammation occurred at irregular intervals for a year, and could generally be traced to patient's indulgence in the old practice; and though every effort was made to break him of it, including blistering the penis, cold baths, &c., success was only temporary.

The severer symptoms, as of obstruction, due, no doubt, to the rigid immobility of the abdominal muscles, and the pain arising from any effort at straining, were always relieved by blistering in the region of the testicle; but this constant source of irritation, besides giving rise to great excitement, amounting at times to severe attacks of acute mania (during which patient was most dangerous) was telling seriously on his health, and an operation for the removal of the misplaced organ became imperatively necessary. It was felt useless to wait until Mr. W. became again quiet and tractable. The testicle was accordingly removed by Mr. Marcus Beck on the 27th Oct., 1883, patient undergoing the chloroform fairly well. The spermatic cord was not tied as a whole, as this proceeding has been said to cause irritation, but the vessels were separately ligatured. The entire operation was conducted on strictly antiseptic principles.

On recovery patient was extremely sick, and called out loudly that he should die, but was not violent. At 10 p.m. same night, temperature 99, pulse 90. Quiet.

Oct. 28th.—Temperature 98, pulse 70. Has slept a good deal. Attendant watching lest he should tear off the bandages. There has been some slight hæmorrhage, but none now. Dressings not removed. Says he feels comfortable, and is quiet, only asking that he should not be killed.

Oct. 31st.—Wound dressed. Union of edges fairly strong. No suppuration. Drainage tube withdrawn. Bore the dressing very well. Very foolish, but quiet.

Nov. 6th.—Wound healed with exception of one point in situation of suture.

Nov. 12th.—To resume his exercise. Bowels now acting regularly. Appetite good. Quite quiet and tractable. Has shown no further sign of violence since the operation, though for the four months previous to it, patient had been affected with almost daily paroxysms of an acutely maniacal character, and had been unable to exert the least self-control.

Jan. 12th, 1884.—Patient continues quiet and well-behaved, though still very foolish. Bowels now act regularly and well. In personal appearance he has much improved.

Feb. 5th.—Still quiet and well.

Cases contributed by S. A. K. STRAHAN, M.D., Assistant Medical Officer, Northampton County Asylum.

I.

Acute Mania in a Boy of Thirteen Years.

Acute mania in the young—before the period of pubescence—is sufficiently rare to invest the following case with some interest:—

Alfred P., aged 13, an agricultural labourer, was admitted on Feb. 26th, 1883, with the following history :—Mother and a brother have been insane and confined in an asylum. About three weeks ago patient seemed "strange," and complained of wandering pains in limbs ; he stayed from his work in consequence for a fortnight, and then appearing better he returned, but in five days again gave up work, complaining of giddiness and left frontal headache. On the next day he was incoherent and violent.

On admission to the asylum he was described as a boy of average development for 13 years. Hair brown, eyes blue, pupils unequal—left dilated. Testes have not descended to scrotum. He tumbles about the bed with his knees at his chin, holds his mouth full of saliva, which is beaten to froth from his churning it through his teeth. If anyone attracts his attention he becomes stationary for a time, and uses all his energy in cursing the new-comer and using obscene language. His obscene vocabulary was limited, but that of condemnation was varied and vigorously applied.

He was kept in bed for the first few days, and did not improve much. After a saline purge he ate well of milk and other slops, but refused solids.

On the third day he became more restless and would not remain in bed, and the weather being cold he was clothed and got up. At this time he was lively and incoherent, would do nothing required of him, and described himself as being "damned well." The pupils were now equal, and the right shoulder was noticed somewhat lower than the left. There was no facial paralysis, and he walked smartly. Next day the "sinking" of shoulder was gone, and he was quieter and more tractable.

On the twelfth day he relapsed and became almost as on admission. Three days later he again improved, and became coherent and well-mannered.

From this time he continued to improve, and on the thirty-fourth day was sent to work in the garden, where he soon turned out to be an intelligent little fellow and a capital workman.

A few weeks later, he being much improved bodily, and apparently well mentally, he was discharged recovered on the eightieth day from the time of his admission.

II.

Hypodermic Injection of Nitrite of Amyl for Lumbago, followed by Epileptiform Convulsions.

The following case may prove interesting from more than one point, and should, I think, be recorded. First, it accentuates the fact that amyl is not so constant in its action as is generally supposed, and that its depressing, inhibiting, or paralysing action on the heart is constantly to be borne in mind. Dr. Sidney Ringer has noticed this occasional action of the drug upon the heart, and also speaks of the strange effect sometimes produced on the nervous centres. He says, "I have seen one case where a woman, immediately after a drop-dose, turned deadly pale, felt very giddy, and then became partially unconscious, remaining so for ten minutes." And again, "A delicate woman, after one-thirtieth of a drop, passed in a few moments into a trance-like state."

Secondly, it has a questionable bearing on the (what some people consider doubtful) action of the heart during the onset of epileptic or epileptiform attacks. The patient in the case given below was admitted as a non-epileptic, had been more than six years in the asylum without having any kind of fit, and has been equally free from convulsive attacks since the occurrence recorded.

Case.—Charles C., aged 53, a chronic maniac in rude bodily health, was seized with lumbago; for several days he was almost unable to move, and the usual treatment—warm baths, saline aperients, &c.—failed to give relief. On October 13th, 1882, when he had been ill several days I administered hypodermically a ten minim dose of a ten per cent. solution of nitrite of amyl in rectified spirit.

Immediately after the injection the pain disappeared; he got up from the bed, and at my request stooped and touched the floor with his fingers. In as nearly as could be guessed about a minute and a half, he suddenly became deadly pale, and sank back upon the bed without sigh or other noise. On assuming the horizontal position, his face, head (bald) and neck became congested, and he was strongly convulsed for about the period of half a minute. The convulsion affected the face and upper extremities strongly; the lower limbs only slightly, the legs being drawn up towards the body and retained in that position. During the convulsion the eyes were open and rolled upward, the mouth was drawn in a grin, and the breathing was suspended. The hands were clenched, and they and the arms were strongly shaken, while the teeth were ground. Immediately after the convulsion the pupils did not appear to be affected. Before and during the early part of the seizure I had my finger on the pulse; it became weaker,

and I lost it altogether just before the muscular movements commenced. As soon as the convulsive movements ceased the patient clambered to the sitting posture, and began talking in an incoherent manner, as was his custom, and although he looked "lost" he answered simple questions.

In about two minutes or perhaps three after his recovery from the first convulsion, he was again attacked in a similar manner. He seemed to "faint," and immediately after rolling over he was convulsed as before, but more strongly. On this occasion I happened to have my ear upon his naked chest listening to the heart sounds, which became weaker, or more distant, and then suddenly ceased; at this instant an attendant standing by called out "He has fainted again." The muscular movements continued for forty or fifty seconds and were appreciably stronger than on the first occasion. The respiration ceased with the stoppage of the heart's action, and began somewhat heavily on the cessation of the convulsive movements when the patient once more sat up and talked as before.

He was now made to inhale some chloroform, some of which was also applied to his bald scalp; this, he said, "made his head nice and cool;" "but," he added, "it is warm inside."

He soon regained his usual colour, and looked as if nothing had happened, except that he had entirely lost his pain, and could walk about and bend the spine with perfect ease. There was no return of faintness, and an hour later he made a hearty tea. He was kept under supervision for four days, and as nothing strange occurred he was allowed to go to work again out of doors, where he has been employed daily up to the present time.

Case of Cerebellar Hæmorrhage. Abnormalities of Cerebral Arteries. By JAMES SHAW, M.D.

J. P., aged 74, was admitted into Haydock Lodge Asylum, on the 26th August, 1880. This was said to be the first attack, and of twelve months' duration. Patient was described as suicidal.

The following information was obtained from the medical certificates on which she was admitted :—

Conversation incoherent and irrational. Restless and excitable. Noisy and violent; screaming, scratching, kicking, and biting when she was being dressed. In constant fear that everyone wished to do her some bodily injury, bleed her, remove her skin, cut her up, &c., &c. She also feared that they were attempting to take her money. Disliked those about her.

Condition on 2nd September.—Circumference of head 21¼ inches. Left pupil larger than right. Gait staggering. Very talkative and incoherent. Irascible. Restless and sleepless at night. Clean in

her habits. Does not know where she is. Says she is "going to be chopped up into pieces."

Sept. 23.—Wanders about aimlessly, and converses incoherently. Has many changing delusions as to the identity of the people surrounding her. Suspicious, fancying people are talking about her.

Nov. 30.—Has had a transient attack of incomplete right hemiplegia with defective speech, from which she has just recovered. During this attack she articulated badly, but there was no true amnesic aphasia, and the hemiplegia only amounted to slight feebleness and diminished power of co-ordination.

Dec. 30.—Gait unsteady, but no localized paralysis. Fancies the Medical Officer is the king, and one of her fellow-patients the devil. Slightly deaf. Very restless and childish.

1881, Oct. 3, 8 a.m.—Seized suddenly with an attack marked by unconsciousness and frothing at the mouth. She partially recovered from this seizure, and was then very weak, lying with her legs drawn up to her body. The left side showed diminished cutaneous sensibility as compared with the right; and the left arm and leg were weaker than the right. She muttered, mumbled, screamed, and shouted, but the word "damn" was the only articulate expression she succeeded in emitting. When being examined she pulled, scratched, and pinched with her right hand. Nausea and vomiting. Pulse 100, and very feeble. Feet cold. Eyes shut, and patient resisted when the eyelids were raised. Left pupil larger than right. Patient incapable of understanding what was said to her, and inclined to be drowsy. Cold affusions to head. Sinapisms to legs. Enem. terebinth, &c. Became comatose in the evening. Stertor avoided by turning the patient on her side.

4.—Still comatose. Face flushed. Conjunctivæ insensible to touch, and pupils to light. Both pupils contracted, left more than right. Pulse 78. Respiration 24. Temperature 99° in left axilla.

5.—Coma continues. Pulse 104. Nutrient enemata after enem. cathart. Died on the morning of the 6th.

Autopsy.—Dura-mater adherent to calvarium. Arteries of brain atheromatous. Venous congestion of pia-mater. Right posterior cerebral artery given off by internal carotid. The basilar artery gave off, after the right superior cerebellar, a small branch from its right side, which wound round the crus cerebri, and then a small posterior communicating branch which joined the right posterior cerebral anteriorly. The arteries given off to the left by the basilar were normal as to their origin and distribution.

The right posterior cerebral divided near its origin from the internal carotid into two branches; one running posteriorly and terminating in the parieto-occipital sulcus, supplying on its way the gyrus lingualis, the inferior margin of the precuneus, and the superior of the cuneus; the other, and larger, passing outwards and backwards, sending one terminal branchlet into the calcarine fissure, and supplying

the gyrus uncinatus, lobulus fusiformis, third temporal convolution, and the occipital convolutions, including lower border of cuneus; this larger branch wound round the gyrus uncinatus close to the hook, and then passed over the lobulus fusiformis. The *cerebral* cortex was apparently healthy.

In the external capsule and external division of the lenticular nucleus in both hemispheres, and in the inner and middle portions of the right lenticular nucleus, there were several small lacunæ which were free from colour as to their walls.

Cerebellum.—The right lobe looked dark, inferiorly, and felt soft, and on cutting into it a clot weighing 5·248 grammes was discovered. The clot was fresh, close to the surface inferiorly and internally, and pressed on the pons and medulla. The fourth ventricle contained some dark fluid blood. The whole of the cerebellum was congested, and the portion of the right lobe immediately surrounding the clot was softened.

The posterior root zones (columns of Burdach) of the spinal cord were slightly sclerosed. Columns of Goll apparently normal.

Remarks.—The motor troubles which occurred in November, '80, probably arose from embolism of one of the arterial branches supplying the right lobe of the cerebellum, or from a slight hæmorrhage into that lobe, the traces of which were obliterated by the fatal attack nearly a year afterwards. Lesion of the right lobe would be accompanied by weakness of the limbs of the same side, in accordance with the opinion held of the direct instead of cross action of the cerebellum from its anatomical relation to the cerebrum, and pathological experience.*

The motor and sensory symptoms were much more marked on the side opposite to the lesion in the second and fatal attack, but this was manifestly owing to the pressure of a comparatively large clot on the cerebral fibres of the right side of the pons and medulla.

The unsteady gait, nausea, and vomiting pointed to the seat of lesion; and the defective hearing after the first attack (although, unfortunately, no examination of the ear was made) is noteworthy, taken in conjunction with Meynert's description of the root of the acoustic nerve, most of the fibres of which, as demonstrated by his preparations, run into the cerebellum.

* See Bastian's "Brain as an Organ of Mind," pp. 393, 507-8. Also "Case of Atrophy of the Left Hemisphere of the Brain," &c., by S. van der Kolk. New Sydenham Soc., 1861, p. 144; and Andral's "Clinique médicale," 1833, Vol. v, p. 679.—[Eds.]

Post-Hemiplegic Hemi-Chorea Associated with Insanity. By W. Bevan Lewis, L.R.C.P., West Riding Asylum. (*Illustrated.*)

The clinical history of the following case, whether regarded from its subjective or objective side, together with the pathological aspects presented, embraces features of interest which I believe are worthy of perusal :—

A. M., æt. 61. Patient is married and the mother of twelve children; has been an active, intelligent, and fairly-educated woman, of temperate habits. She has been subjected to *much ill-usage by her husband and greatly neglected in her late illness.* Her family history appears free from any predisposing neurotic element, but her sister is said to have had a "stroke." Patient has suffered from rheumatic fever, but her present illness dates two years back, at which period she had a paralytic seizure affecting *the right side of face, right arm,* and depriving her of the *faculty of speech,* but in no way implicating the right leg; she did not lose consciousness. Bed-ridden for the past eighteen months, with chronic ulcers on the legs, neglected and half-starved, she had become wretchedly enfeebled and emaciated. Six months ago she began to *lose control over the movements of the right leg,* and about the same time the right arm, which had *regained much of its former power,* became the seat of the restless choreic movements present upon admission. Her speech, which she had never fully regained since the "stroke," became more difficult and much impeded at this time, and coincidently with the onset of choreic spasms mental derangement supervened.

Upon admission patient endeavoured to give a detailed account of her past history; could recall correctly the events of the last few days; knew where she was and why she had been brought to an asylum; said she had had much trouble of late. She talked in a rambling strain about her husband; said he was dead, but had come to life again; declared a few moments afterwards that he was killed, her son shot and a daughter drowned lately—all delusional statements. She exhibited beyond simple depression a notably peevish, querulous humour, a distrust of those around her, and an obstinacy associated with *childish inattentiveness* and apparent *utter inability for the slightest mental exertion at times.*

Her speech was notably choreic, broken, spasmodic, the last word or syllable emphasized in a breathless manner; articulation at times much blurred; naming and propositionising good, but both appeared to cause unnatural effort. The auditory and visual elements of written and spoken language were fully appreciated. The movements of the lips were very inco-ordinate; there were clonic spasms of the facial muscles of the right side amounting to contortion and grimace; the tongue was frequently thrust forward during speech, the angle of the mouth was slightly drawn to the left side; tried to whistle, but failed, thrusting the tongue out. There was no dysphagia.

FRONT.

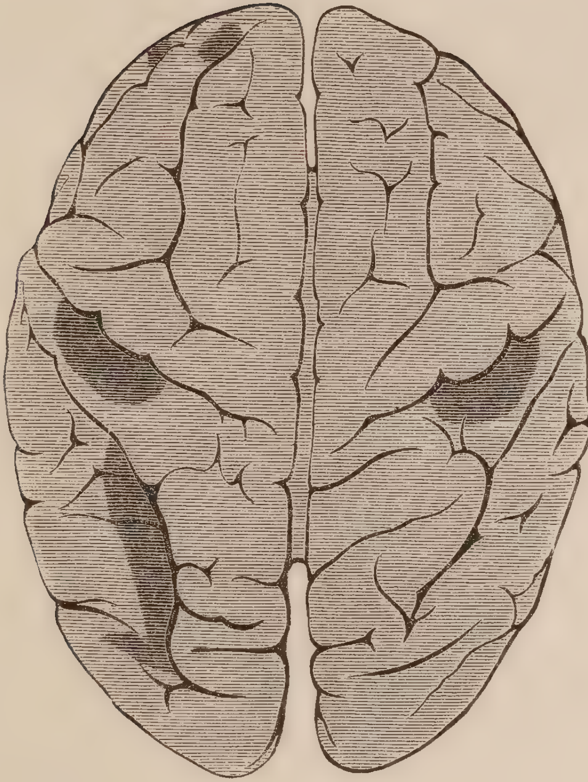


FIG. 1.—UPPER SURFACE OF BRAIN.

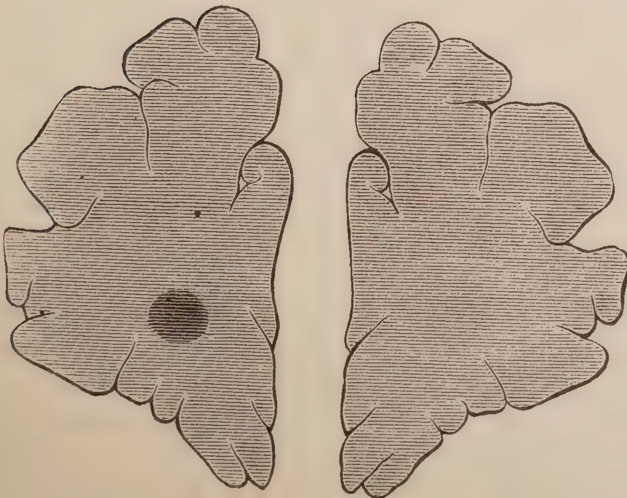


FIG. 2.—PREFRONTAL SECTION.

During the whole period of examination there were restless movements of the limbs, involving the right arm chiefly, and to a much less extent the right leg. The right arm, as a rule, lies perfectly flaccid and helpless, but during conversation, upon making any voluntary efforts, and especially during excitement and emotional disturbance, the limb was thrown about in disorderly, choreic movements; tossed into positions of flexion or extension with alternate pronation and supination of the fore-arm. The muscles of the hand, extrinsic and intrinsic, were not affected; the left arm was unaffected by paralysis or spasm. The dynamometer registered for the right hand a pressure of 8 kilos.; the left hand 10 kilos. Upon a second trial—for the right 7 kilos.; and for the left 11 kilos.

Galvanic reactions.—On the right side the biceps alone gave evidence of the reaction of degeneration, the Anodal closure productive of a minimum-contraction being caused by 18 cells; the Kathodal closing-current giving the same with 15 cells. The reaction of three muscles of the arm gave the following results:—

	KSc.	ASc.	KOc.	AOc.
Pectoralis Major	14	26	Nil at 50	Nil at 50
Deltoid	16	28	do.	do.
Biceps	15	18	do.	do.

Faradaic currents gave similar indications.

The limbs were extremely emaciated; the right and left arms at thickest part of biceps measured $5\frac{1}{8}$ inches; the right and left thighs $8\frac{2}{8}$ and $8\frac{3}{8}$ inches respectively; the right and left calf $5\frac{7}{8}$ to $6\frac{2}{8}$ inches respectively.

The triceps-reflex was absent from left arm, but unusually brisk in the right; the patellar tendon-reflex was *almost abolished in both legs;* there was no ankle clonus; the superficial reflexes, however, especially the plantar, were extremely brisk. The quadriceps responded sluggishly to percussion. As regards muscular power, she could only support herself upon the left leg—locomotion was impossible, and upon attempting it with great timidity, the right foot was jerked forwards, sideways, or backwards—movements which she endeavoured to control by standing on the left leg with the right leg twined around its fellow. Lying in bed, she could draw up both legs briskly, there appeared to be no great loss of power in the right member, but merely an extreme inco-ordination which prevented her attempting to use it in progression.

Muscular sense was intact; she was fully conscious of the position of her limbs, appreciated the difference in weights, and by other tests proved its retention. There was no marked cutaneous anæsthesia; tactile appreciation was very slightly disturbed upon the right side, as seen by the following results of the æsthesiometer test .—

Tip of Finger	Right side	·1 inch.	Left side	·1 inch.
Ball of Thumb	"	·4 "	"	·3 "
Back of Forearm............	"	·8 "	"	·7 "
Plantar aspect of Great Toe	"	·3 "	"	·2 "
" " Foot......	"	·5 "	"	·2 "

Sensibility to pain and temperature were, if anything, slightly increased on the right side. As regards the special senses, smell was acute and discriminating, so also was taste ; colour appreciation was good, but visual acuity reduced Sn. $\frac{6}{12}$ in both eyes alike. The left pupil reacted sluggishly, and the right pupil was perfectly rigid to light; the consensual and accommodation movements were perfect and active in both. The sense of hearing was unaffected. As regards the respiratory and circulatory systems, nothing abnormal was detected beyond the slightest possible roughening of the first sound of the heart at the apex—the heart's rhythm was undisturbed, its impulse of fair strength, and no apparent alteration in its dimensions perceptible. The urine was pale, limpid, of sp. gr. 1009 ; contained no albumen or sugar. Patient died after a residence of eight months.

Autopsy thirty-nine hours after death.—Body excessively emaciated ; rigor mortis everywhere absent ; slight hypostatic lividity over back ; greenish discoloration of abdomen.

The skull-cap was symmetrical, bones thin and light ; no adhesions of dura-mater ; the longitudinal sinus contained a firm fibrous clot extending through both lateral sinuses down into the jugular vein of each side ; this clot was *strongly adherent to the lining membrane of the sinus, and was evidently of long-standing formation.* The brain was of small size and generally reduced in consistence ; the convolutions, which were of fair complexity, showed, however, a universal and marked attenuation and a peculiar rugose aspect of their surface, such corrugation being much more marked in the anterior half of the brain, both frontal lobes being very considerably implicated. The membranes were thin and translucent ; the minute superficial venules at the vertex evidenced a long-continued stasis of cerebral circulation here which had resulted in the formation of *firm decolorised blood-clots* marking out these vessels as whitish streaks to their minutest visible ramifications. A superficial softened patch involved the cortex of the posterior part of the left supra-marginal, anterior limb of angular and second annectant gyri of this hemisphere ; similar foci of softening, characterised by their peculiar milky opacity, involved *both ascending parietals along their middle third ;* a few very insignificant softened patches appeared on the fourth right annectant and anterior end of the frontal gyri. The cortex generally was wasted and thin. Upon cutting carefully through the ganglionic region at the base, both outer and inner capsules were found perfectly free from lesion ; and, beyond a very minute hæmorrhage of quite recent date, involving the posterior part of the left lenticular nucleus, the ganglia of both hemispheres showed no appreciable change. In the right hemisphere, however, a blood-clot, half an inch in diameter, firm, fibrous, not in the least decolorised, with a calcareous vessel occupying its centre, involved the prefrontal sections of medulla just in front of the spot where the head of the caudate dips down to the base. In other respects the brain showed no material change.

The whole brain weighed 1,173 grammes; the right hemisphere 500 grammes; the left hemisphere 510 grammes.

The heart was found free from any valvular lesion; the kidneys were wasted, but not contracted and cirrhotic.

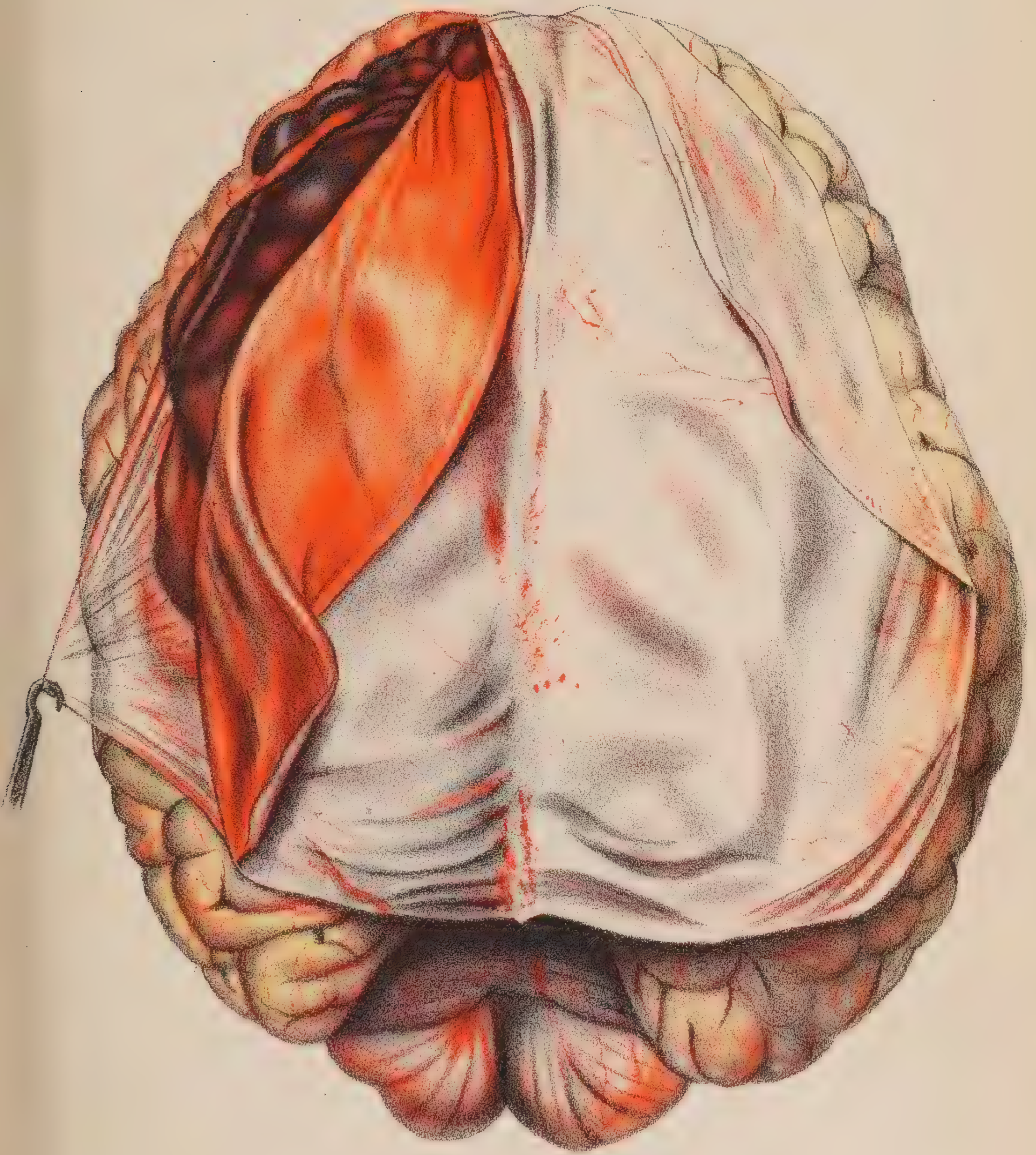
Remarks.—We have here an illustrative case of the association of chorea with insanity, such as not unfrequently occurs in asylum practice, and an analysis of the symptoms presented by the patient as leading up to a recognition of the nature and topographical distribution of the lesion or lesions to be predicated therefrom cannot fail to prove instructive. That the woman suffered from chorea was clear, but which of the multiform species of this widely embracing generic term her malady is to be classed amongst was not at first sight very evident. We find in her case the usual diathetic association of chorea—she had suffered from an attack of rheumatic fever. Sudden mental shock or fright are accepted as frequent exciting causes of choreic states, and this patient's domestic relationships—penury, starvation, ill-usage—introduced an element of intense mental disquiet and anxiety which would amount to mental shock "drawn out thin," to use Dr. Hughlings-Jackson's expression. Passing, however, from these less cogent points to the study of the symptoms, we observe first that the convulsive phenomena were limited to one side—the right; and we instinctively demand a hemispheric distribution of lesions as accounting for these unilateral choreic spasms.

We note that the onset and progress of the malady dates from an attack of partial right hemiplegia with aphasia in which face and arm participated to the entire exclusion of the leg; a slow recovery ensues, and upon the restitution of a fair amount of power in the right arm, this member, together with the right leg, the facial and articulatory muscles become the seat of choreic spasms. Such a history reads like a case of ordinary post-hemiplegic chorea in which a coarse lesion is usually located in the posterior division of the internal capsule, impinging upon the thalamus; but observe, *there was no association of tonic rigidity with the choreic spasm.* We may, therefore, safely exclude our case from the category of choreiform movements consecutive to lesions of the converging medullated fan near the capsule.

Nor, on the other hand, is it to be included amongst those rare cases described by Gowers as "hemi-ataxia;" our patient exhibited no defect of muscular sense, was fully con-

scious of the position of her limbs, and could guide her movements with fair certainty even with her eyes blindfolded when lying on her back.

A curious feature in the case is the extreme sluggishness of the deep crural reflexes—the knee-jerk being almost abolished in both legs; whilst, on the other hand, the triceps reflex, not present on the left side, was very unusually brisk in the right arm; the biceps muscle also on this side gave the reaction of degeneration. Whatever view be taken of these signs of spinal implication, it must be remembered that the right leg was not enfeebled beyond what might be explained by the muscular atrophy due to prolonged disuse. Dr. Dickinson's views of the pathology of chorea, and the suggestive cases of chorea in dogs where the choreic movements persisted after high section of the cord, such as are quoted by Gowers, Carville, Bert, and others, demand that we pay due attention to the "spinal symptoms" associated with chorea. We cannot, however, despite these symptoms and the reflex iridoplegia in our case, long hesitate in deciding upon a *cerebral* rather than a *spinal origin* for the choreic spasms; paralysis of the face and arm of the right side with aphasia, slightly diminished cutaneous sensibility upon the side of paralysis, hemi-chorea associated with mental aberration, all indicate a cerebral origin for the convulsive state. As to the nature of the lesion? The outset of the "stroke" was unattended by lapse of consciousness, and this taken into account with the age of the patient, the absence of albumen in the urine, the presence of the rheumatic diathesis, would indicate softening as the result of embolic plugging or of thrombosis. The post-mortem examination revealed quite symmetrically-disposed patches of softening in the motor area of both hemispheres—over the middle third of each ascending parietal gyrus, which are traced to a venous thrombosis resulting from partial plugging of the lateral sinus and extension of an old organised clot backwards into the minute venules at the vertex; the left supra-marginal and part of the angular gyrus are likewise implicated. Apart from the significant distribution of these tracts of softening, I would wish more especially to call attention to the conditions here so supremely favourable to the capillary pluggings which such a venous stasis would predispose to—in other words, to the conditions demanded for the establishment of chorea by the views of Hughlings-Jackson and Broadbent. It is much to be regretted that from some



Marks. del.

Mintern Bros. lith.

TO ILLUSTRATE DR. SAVAGE'S CASE.

oversight the brain and spinal cord were not submitted to microscopic examination ; but the presence of a minute hæmorrhage into the left lenticular ganglion and a much larger extravasation into the right prefrontal region, I take to be the expression of the general venous obstruction in the brain, which would probably have been found associated, upon microscopical examination, with capillary pluggings in the ganglionic regions at the base.

As regards the mental features presented by the patient, the peevish fretfulness was notable, and suggested the impairment due to cerebral atrophy; but the more interesting feature was the *extreme apathy, amounting to torpor*, the want of volitional initiative, apart from any profound dementia, which passed eventually into stages of prolonged somnolence, broken by occasional manifestations of irritability and sobbing ejaculations when the choreic movements predominated. In an article read before the British Medical Association at Liverpool, I have quoted cases of extreme atrophy of the frontal lobes associated with this excessive torpor and somnolence, and I would incline to relegate the case under consideration to the same category in support of the view that these lobes are supremely the seat of volitional activity, the highest initiating and determining faculties of the mind.

Case of General Paralysis, with Pachymeningitis. By Geo. H. Savage, M.D. (*With Illustration.*)

(*Reported by Dr. W. R. Wood.*)

S. B. G., aged 61 years. This patient, an artist, was admitted into Bethlem Hospital November 22nd, 1883. The symptoms first noticed occurred six months before his admission. He became very irritable, and mistook the days of the week. He is said to have had hallucinations of sight, and on admission was quite incapable of connecting his ideas consecutively. He was unable to answer any questions coherently, not even knowing his own name. He was in a very restless condition, fidgeting with his hands and continually rubbing the back of his head. There was very marked tremulousness of the tongue and facial muscles, and great hesitation in his speech. His gait was very staggering.

Jan. 16th, 1884.—He had a series of epileptiform attacks, and was frequently grinding his teeth.

Jan. 28th.—Had another series of fits, which left him very feeble, and obliged him keep to his bed. He passed everything under him, and being very emaciated, bed-sores developed on his legs

wherever they were in contact; also over the sacrum. He remained for several weeks in a more or less semi-unconscious state.

April 22nd.—Had another series of fits, which caused general convulsions of both sides. He lay on his right side, with his arms drawn up over the front of his chest. There was considerable rigidity of the left arm. His legs were also flexed, and could not be straightened. He never regained consciousness, and died April 26th without any further change.

Post-mortem.—Calvarium thin. On left side of brain, pachymeningitis with hæmorrhage. Membrane distinctly formed. Lakelets in both hemispheres, especially over the ascending frontal and parietal regions. The appearance of the membrane gave the idea that there had been a fine membrane formed, and more recently a fresh hæmorrhage, which had not got beyond the stage of coagulation. At the base the fine membrane was easily separated from dura-mater.

The temporal bones on both sides were porous and brittle.

Cord.—Grey matter wasted. *Brain* 44ozs.

Lungs.—Right, much congested, small portions sinking in water. Right 34ozs.; left, 12ozs.

Heart.—Pericardium adherent, adhesions recent. Atheroma of ascending aorta. Heart weighed 12ozs.

Kidneys.—Capsules adherent in both. Right, 5ozs.; left, 4½ozs. Liver pale, 46ozs. Spleen, 3ozs.

Congenital Mental Defect with Delusions of Suspicion in Twins. By T. W. McDowall, M.D., Morpeth. (*With Portraits.*)

As the mental defects of twins have of late attracted some attention, the following brief record of twin lads, at present under my care, and whose portraits are given in the accompanying lithograph, may not be without interest, especially as the lads afford a remarkable example of similarity, not only in their bodily appearance, but in their mental characteristics.

They are the illegitimate children of a woman who was seduced whilst in service, was delivered in a workhouse, and has since resided there almost continuously. Being unable to obtain the desired information by correspondence, I went to the workhouse, saw and conversed with the woman, and learned from her and the master as much of her history as could be obtained.

She was only about twenty years of age when the twins were born, and since then she has had two illegitimate children. For the last twenty years the workhouse has been her home; occasionally she has gone away for short periods when she could no longer endure the

Fig. 1.

Fig. 2.

otographs. Mintern Bros. lith.

TO ILLUSTRATE Dr. Mc DOWALL'S CASES.

were in close and constant pursuit of him, and meant to destroy him; and if he had a knife he would stab them. On ordinary subjects he was rational enough. He knew his whereabouts, the day of the week, &c. He gave an account of himself and of his relatives, and laughed outright at some of his adventures whilst on the tramp.

He was at once induced to employ himself, and in a few weeks he was sent to the tailor's shop as an apprentice. There he has conducted himself, as a rule, very well ever since. He has not shown any great aptitude for the work, but he can sew fairly well and put a jacket together under supervision. He was found to be a masturbator; sometimes he indulged in the habit to a great extent, but during the last few months it is believed that he has nearly, if not altogether, abandoned it. At irregular intervals he has had attacks of excitement and violence. Without any visible cause or previous warning he has attacked the man nearest to him with hands and feet, swearing and using abominable language. Such attacks have rarely lasted more than a few hours, never a whole day, and were evidently due to his delusions of persecution. Those attacks have diminished in frequency and severity, but there are still peculiarities in his conduct, and he is still deluded. In the airing-court he may frequently be seen skipping sideways along the path, shaking his head violently and uttering a curious sound. When asked why he does so, he laughs, but gives no explanation. He very rarely now stops work altogether, but when his delusions trouble him, he becomes a little unsettled, perhaps weeps, and makes curious remarks to his neighbours; indeed, persons not knowing his delusions would be unable to make out what he would be after. He now never fights, except with his brother.

As to his true mental condition, it may be described as imbecility with delusions of suspicion. That there is a congenital mental defect cannot be doubted; and it is exceedingly probable that his delusions developed at an early age. But as to this I can obtain no reliable information. The master of the workhouse, who saw him grow up, is now dead; the mother believes that her son is a very clever boy, quite right in his mind, but cruelly ill-used. This is certain, however, that although he is described as having been smart enough at his lessons, he has been from early childhood a most unmanageable youth, subject to fits of frantic passion, and dangerous to his neighbours.

Concerning the brother John (Fig. 2), extracts from the Case Book will afford sufficient evidence of his history and mental condition.

He was admitted on the 10th August, 1881. The medical officer certified that the lad was suspicious, surly, irritable, and violent; that he had attacked several people in the workhouse without provocation, and that on many occasions he has been dangerously violent.

History.—He has been all his life an inmate of a workhouse. He has always been of a violent and malicious disposition, and has committed numerous assaults. (The other facts have already been given.)

Present mental state.—He knows his surroundings, and says that he has been sent here because he is wicked. He states that he has been very ill-used at the workhouse, and gives that as a cause for his violence. His memory is good. His expression is sullen and rather stupid.

Physical condition.—It is only necessary to note that in the left choroid there were patches of atrophy. This makes it probable that he is the twin who had fits in early childhood.

It is really unnecessary to reproduce the entries as to his conduct, &c. For a long time they only amounted to this, that he did a little work in the upholsterer's shop, that he behaved well, but was unsociable, sullen, suspicious, and deluded. He complained that the attendants and patients ill-used him and stole his food. Without having ever committed an assault, except on his brother, whom he hates, he has often threatened to be revenged on his persecutors. In November last it was thought he might safely be sent to the shoemaker's shop. Here he has done remarkably well. He has worked steadily and intelligently, and apparently with some benefit to his mind, for he does not appear to be quite so sullen and unsociable. He is still deluded, and states that both at work and here he is constantly tormented by people calling him nasty names. He is a masturbator, and requires watching to prevent him indulging in indecent practices with the idiot lads in the same ward.

The accompanying lithograph gives a fairly good idea of the appearance and facial expression of the lads. George's portrait (the top one), rather flatters him; the forehead is a shade high, and the nose is too good. The expression is too intelligent; it should be lower and more criminal. In life, the boys are so alike that a stranger could not tell the one from the other. The structure of the head is decidedly low, almost criminal, and the expression is stolid and unintelligent. They differ somewhat in stature and weight. George is 5ft. 5½in. in height, and 150lbs. in weight; John is 5ft. 3½in., and 125lbs. Their build and gait are identical, and their neck is thickened by a slight enlargement of the thyroid.

So far as my experience goes, the case of these lads is unique, and I have not discovered a similar one in medical literature. It is not so very unusual to find twins bearing a striking resemblance to each other, and plays have been constructed to show the confusion which may thus arise. But here we have two lads so alike that they are with difficulty identified, and at the same time presenting symptoms of mental derangement essentially similar.

OCCASIONAL NOTES OF THE QUARTER.

Case of Gilbert Scott.

The past quarter has been rich in medico-legal interest. There have been at least three trials of importance in which insanity has played the chief part. The case of Weldon *v.* Winslow must for the present wait till the judges have considered the necessity of granting a new trial.

In the case of Torriano it was found that the testatrix was of unsound mind, and the case merits a short and separate notice, which we shall supply later.

In the case of Gilbert Scott several most serious points require special consideration.

In the first place the trial was an extension of the power of the Court of Chancery in a new direction. Hitherto the Masters have been the sole judges in inquiries of this nature, and they have done their work satisfactorily; but we believe that they would at once own that it is better to have a judge more used, from daily experience, to modes of procedure, and to the receiving of evidence in the most difficult and the strenuously opposed cases.

The case of Scott was the very first in which the question of sanity was tried before a judge and a special jury, and we are quite inclined to think that the result was eminently satisfactory.

The majority of professional and lay papers united in thinking that the history of the case justified the finding of the jury, though it must be added that by a strange chance, two leading journals had extraordinarily weak articles throwing doubts on the unanimous verdict of the jury. The weakness of these articles gave evidence of such ignorance of the subject as allows us to ignore them.

That Mr. Scott should have retained his special abilities is not astonishing to those who are intimate with insanity. Many a dangerous lunatic is brilliant in general conversation, and is trustworthy as a witness, common or expert. Fortunately the judge fully understood this, and pointed out that to manage one's self and one's affairs meant more than being able to do one's professional work; he pointed out the necessity to society of a man's being able to appreciate his duties to his family and to his relations.

In the conduct of this trial, as usual, there was some conflict of medical evidence.

In some cases there is necessarily honest difference of opinion as to the necessity of shutting a man up in an asylum, and, as the law stands, a physician often feels himself awkwardly placed; for, though he may believe a certain man to be insane, he may think him able to manage his affairs, yet in giving his opinion he has, like the jury, to give a double finding, "of unsound mind, and unfit to manage himself and his affairs."

If the physician-witness has such difficulties, we think he should let them be known, and should not give an opinion which he believes to be untrue, even for the good of the patient.

We do not suppose the time is near when the experts on both sides will meet and arrange what they are to say; this might be best for the so-called honour of the profession; but English common-sense and hard-headedness would oppose this summary way of disposing of difficulty.

The history of the case was simple, and, when read connectedly, leaves no doubt on the unbiassed mind. A man of great culture and refinement, a man who was looked upon as a model of good breeding and tender feeling, one who was very fond of home and domestic life, and who esteemed himself fortunate in his home relationships, in a short time became exactly the reverse.

There was no special shock, and the family history is not sufficiently known to allow one to make reference to it. Among the earlier causes of the disorder, or, as some will have it, among the earlier symptoms, was alcoholic intemperance.

Those who knew him best say the drinking began after the earlier symptoms, such as restlessness and irritability, showed themselves.

For some time early in the summer of 1883 Mr. Scott gave way to habits of intemperance.

He took considerable quantities of light wines, and at times indulged in spirits; later he took anything which came in his way, and became more restless than ever.

He developed ideas of persecution (partly due, it may be, to alcoholism), he believed there were conspiracies against him, and after appealing to the police and to the Home Secretary, he was prepared to take the law into his own hands; he roamed about at night, and was searching for conspirators, and was possessed by the idea that he was drugged.

His menacing attitude, and his unrestrained conduct generally, induced his friends to take further advice, and he was sent into Bethlem Hospital as a temporary measure, so that time might be gained and opportunity given to decide on the nature of his case and the probable future.

The general feeling of those who then saw him was that the restless excitement, the sleeplessness, the desire for drink and sexual excess, all pointed to general paralysis of the insane. While in Bethlem he was extravagant in his actions and in his talk, his dress was fantastic, and he generally wore bunches of flowers or leaves in his button-hole. He did not understand his position, and said his companions in the ward were all sane. He was remarkably affable, and talked in a very free way about sexual matters, so as to disgust some of his companions.

At this time he was not only able to do the ordinary mechanical part of his professional work, but he showed power of originality in design quite equal to that of his ordinary work.

He escaped ingeniously from Bethlem, and after returning to his low haunts and evil companions for a time, he escaped to France, where he was possessed by the idea that he was pursued by detectives and was drugged. He returned to England, and threatened to injure two people, including one of his old friends, a barrister. He was examined by Dr. Maudsley and Dr. Savage, and on their certificates he was sent to a private asylum. The certificates testified to the state of mind of Mr. Scott being one of restlessness with suspicion. Both physicians believed that he was concealing as much as possible his ideas, from the excess of suspicion which ruled his actions.

Once more Mr. Scott escaped to France, and after many adventures returned to England, and for a time superintended the building of one of his large churches. He behaved in very strange ways, and consorted with strange companions.

He was ejected from places of public resort in consequence of his behaviour, and he was considered by some to be dangerous. He was said also to have retained his ideas about the police conspiracy, and also about the drugging.

He met a Frenchwoman whom he had known in a brothel, and went about with her. He introduced her to his wife, and to other persons of social distinction, and saw nothing wrong in so doing. Even at this time he made at least one

suspicious night journey, and returned with the excuse that he had not had money to go where he wanted.

The above were the facts as stated by those pressing for the inquisition; and the only difference that arose was whether they could be explained away naturally, or whether they had existed as symptoms of insanity, which had been recovered from, or whether they were only the symptoms of alcoholism.

Special private inquiries were held, at which representatives for each side were present, as well as a physician representing the Court of Chancery, who acted as moderator of the Court or guardian of the patient. These inquiries seemed to have confirmed the opinion of the physicians on both sides in their own faiths, and formed the ground for severe cross-examination. It is noteworthy that, though both parties were acting *bonâ-fide*, they differed strangely as to the facts or statements in one or two particulars, and in any future inquiry it would be well to have a shorthand reporter to take notes of the investigation.

At the inquiry the witnesses were excluded, so that it was not followed by those medically interested in person. The medical witnesses on both sides were examined, and the majority who had sufficient opportunities of seeing the patient, and who had special knowledge of insanity, were convinced that Mr. Scott was of unsound mind, and unfit to manage his affairs.

On the other side, medical evidence was given from the point of view that the mental excitement was merely the temporary result of alcoholism.

Other evidence, such as that of men connected with Mr. Scott only in business, was shown to be worthless. The judge summed up excellently, concisely, and strongly, pointing out that a man may be able to do professional work and yet not able to be treated as sane.

It was shown how the patient had passed from a condition of self-control to one of loss of control, and that disease was the cause.

It is necessary once more to insist on the importance of recognising that drink may produce insanity, and that it is not of much importance what the cause of insanity is, if it can be shown that the patient is not responsible for his actions in consequence of mental disorder.

All having experience of insanity and of alcoholism will

be ready to admit that many of the symptoms of the insanity were such as might fairly be attributed to alcohol. Suspicion, ideas of conspiracies, and fear of poison and drugging are common in insanity due to drink, to morphia, and to other active agents which affect directly the nervous tissues.

Similar ideas may arise from other causes however. But the point is this, that Mr. Scott was undoubtedly insane when taken to Bethlem Hospital, although he had been drinking. He was then suspicious and dangerous, and the witnesses on his side failed to convince the jury that he had recovered from his insanity at the time of the inquisition.

The attack of insanity was related to alcoholic excess, but in what way?

We do not think it is possible in many cases to say, from the symptoms, whether a person took to drink because he was insane, or whether he became insane from drink. Alcoholism will produce similar symptoms in both cases.

The history of the attack and the change in the habits of the individual must decide which was the first symptom of disorder.

This *cause célèbre* ended by the jury finding an unanimous verdict of insanity and inability, but, in the meantime, Mr. Scott had crossed to the Continent, where he is now living. He is still superintending his works in England, and has written to the leading daily journal a characteristic letter defending his sanity. He says that in France he is sane, as is certified by French doctors; in England he is insane, at what point does the change take place?

We expect to hear that an appeal is to be made for a new trial on the ground of some legal informality; we trust that this will not succeed, as the terrible and ruinous cost of such a proceeding seriously affects the patient's future.

Dramatic Copyright.

A case of considerable importance with regard to the law of dramatic copyright, has recently been decided by the Court of Appeal. Everyone who is concerned in the management of asylums has taken part in, or has authorised performances which, whether dramatic or musical, probably could not have taken place as a public entertainment without infringing copyright; and in the

belief that the subject is of peculiar interest to our readers, we append extracts from the *Daily News* and *Standard*, the one giving a short exposition of the law, and the other showing what absurdities a contrary decision would have involved.

"Daily News," May 13.

Yesterday the Court of Appeal, not without some hesitation, and even division of opinion, decided that private theatricals are, if some rather indefinite limits be observed, no infringement of dramatic copyright in the piece performed. The case, which is one of great public interest, arose in this way. A representation of *Our Boys* was arranged to be given at Guy's Hospital for the amusement of the doctors and nurses in that institution. The play was acted three times by an amateur dramatic club, of which the defendant in this action was a member. Admission was free, and the Governors of the hospital paid all the necessary expenses. Besides the special invitations, the actors received tickets to distribute among their friends, and altogether more than a hundred and fifty spectators were present. On one occasion there was also a reporter. Now, the copyright of *Our Boys* belongs to Mr Duck, and he forthwith sued to recover penalties under the Copyright Act of 1833, which was passed at the instance of one of the most successful playwrights of modern times, the late Lord Lytton. The statute says that "Every author of a play, opera, farce, or other piece, shall have, as his own property, the sole liberty of representing, or causing to be represented, at any place or places of dramatic entertainment any such production," and it goes on to provide for damages, or in the alternative for penalties of forty shillings each. No question better suited for ingenious argument could well be devised. What is a place of dramatic entertainment? Is it any place where, as a matter of fact, a dramatic piece has been performed? If not, the words might just as well have been omitted from the Act, and it is difficult to suggest a reason why Parliament should have put them in. Is it, on the other hand, a theatre? Must it be a public place, or would it include such private theatres as were erected by Charles Dickens long ago, and by Sir Percy Shelley quite recently? What does entertainment mean? Lord Justice Bowen, having recourse, as is natural enough in a case of philological difficulty, to the Authorised Version of the Bible, observed that it could not mean mere amusement, because Abraham "entertained" the angels unawares, when all he did was to give them food. It is notorious that nothing bothers lawyers, especially judges, so much as a definition. They will always avoid defining anything if they can. When fairly driven into a corner they have been known to follow the famous precedent of Bishop Blomfield when asked what an archdeacon was. But to hold that a place of dramatic entertainment is a

place wher e people are dramatically entertained is to make the Legislature in this instance talk nonsense. Lord Justice Bowen indicated one way out of the difficulty by suggesting "a place appropriated for the time to dramatic performances, to which all, or a limited portion of the public, are admitted."

"Standard," May 13.

A theatrical representation in a private drawing-room, before an invited audience, is plainly not such a "dramatic entertainment" or such a "representation" as can do any injury to a copyright proprietor; and the inference is natural that the Act does not include such a case at all. The performance at Guy's Hospital differed only in degree, and not in kind, from "private theatricals" of this description. The audience were, it is true, invited by tickets, some of which were issued in blank to those connected with the Institution. But the recipients were, of course, bound to distribute these tickets among their friends; and this fact in itself no more constituted the affair a public one than a ball can be said to be "public" because some of the invited guests have a general commission to bring "dancing men" with them. The test whether money is or is not paid by the spectators is not, of course, the true one. If so, it would follow that a London theatre might be opened gratuitously, for the express purpose of ruining a neighbouring manager or a rival author. We gather from the judgment of the majority of the Court of Appeal that the true question is whether there has been a public performance of a copyright piece. The question of publicity must be always one of fact, and probably the performance at Guy's Hospital went as near the line without transgressing it as was possible. Nevertheless, we think that the opinion of the public will entirely endorse the decision. An amateur company which openly competes with professionals, and invites the public to leave the performances of the latter for theirs, stands on very different footing from that occupied by the defendant in "Duck v. Bates." No reasonable man could think that the value of the copyright in *Our Boys*, which had enjoyed so extraordinary a run at the Vaudeville Theatre, could possibly be injured by its gratuitous performance before an invited audience at Guy's Hospital. Had the decision of the Court of Appeal been the other way, it is not too much to say that organisers of the most ordinary drawing-room theatricals would have had reason to be cautious how their programmes were selected; while no real additional protection whatever would have been afforded to dramatic authors or managers. No one has any sympathy with piracy; but amateur actors like those at Guy's Hospital were no more real pirates than the Pirates of Penzance.

PART II.—REVIEWS.

Clinical Lectures on Mental Diseases. By T. S. Clouston, M.D., F.R.C.P.E. London: J. and A. Churchill.

As in our short notice of the book last quarter we congratulated the author on his success, we feel it our duty to point out more in detail the chief merits of the work, and also some matters about which there may be ground for difference of opinion.

Clinical lectures on insanity have long been wanted, and even those by Dr. Clouston are not so complete as are clinical lectures on other branches of medicine. The physician to an asylum has, as a rule, too few students and too many patients, so that he never has the exact knowledge which the general physician has of the minute details of his cases, and if he had, he would not have time to collect and make the most of them.

We trust that at some of the hospitals for the insane, races of students are arising who will be eyes and hands for medical heads.

Dr. Clouston has encouraged his students and juniors to assist him in his work, and much of the careful clinical observation recorded in this book has been done by juniors.

The whole book is a clear reflex of the author's mode of thought and action, and recalls his personality in the wards and by the bedside with great distinctness. He does not propound any new philosophy, but, as might be fairly expected, he is a great believer in localisation of function in the brain. He is prepared to divide the brain into sensory, motor, and other areas, including centres of organic life. He does not agree with Ferrier in some of his localities, and looks fondly to some of the inferior and parietal regions.

We cannot accept all his interpretations unquestioned or unexplained. Thus he says that in excited melancholia the motor centres are more excited than in other varieties. If this be a paraphrase for saying there are active movements in this variety, we accept it, but if it means that probably the motor areas are primarily affected in this variety, we want more evidence. We believe one French writer went so far as to attribute repeated attempts at suicide to unrestrained motor excitement. This, like many other extensions

of localisation of function, must be much more fully investigated before it can be accepted. The present position of the theory of localisation of function is a great advance on the old one of phrenology, but will probably cease to make any great advance for some time, till, in fact, careful and detailed examination of facts provides a new wave which will carry progress further still. Every advance following the discovery of some new law gets hampered, and for a time arrested, by the too zealous use of it made by its friends, and so it will be with localisation of function.

We must learn more about the simpler relations of sensations and motions and their combinations before we can attempt to localise complex functions.

Not only is Dr. Clouston ever ready to seize on the last advance which science has made to assist in the understanding of symptoms, but he is ready to accept the most common-sense modes of treatment, and nothing is so eminently satisfactory in these clinical lectures as the directions of managing and treating both friends and patients.

We shall refer to certain hobbies of our author later. He is not only a believer in the localisation of function, but he is on the watch for evidences of the evolution of types and for the retrograde steps as seen in reversions. We are prepared to admit that among idiots there are examples of reversion, but among the actively insane we have failed to find such examples, save in some cases of dementia.

Emotional disturbance can hardly be considered as a reversion, and display of ferocity and so-called brutality in the insane are quite unlike the ferocity of the animal in defence of life and freedom, in search for food, or following its sexual desire. Dr. Clouston sees this. Thus, on page 99, he says: "Fear, the instinct of self-preservation, unreason, suspicion, and the instinct of freedom, are all mixed up in the case" of resistive melancholia.

We shall not be able to give a summary of the whole book, for it is one of those so free from padding that it is in reality a summary itself.

The book opens with a useful chapter on the clinical study of mental diseases, and here, by the way, we would suggest that the common use of the term "mental diseases" is incorrect, though use has perhaps established it. We doubt the correctness of speaking of disease of a function. Disorder of function, but disease of an organ. We object to the statement at the foot of page 2 that "It was soon apparent that

the brain was the sole organ of mind," more especially as Dr. Clouston's teaching is clear enough in pointing out the mental relations of all parts of the body. There is a tendency to use new terms and to adopt older ones which is all very well in delivered lectures, because they arrest the attention of an audience, but we doubt the advantage of their use in a written lecture. "Mentalisation" and "expiscate" are not nice words, and Greek compounds are not to our taste. The great tendency of the present day is to avoid purely technical terms, even in pure science, and to add to our nomenclature Psychalgia, Psychlampsia, Mono-psychosis, Psychocoma, &c., is a burden not to our mind worth bearing. These terms may have served a useful purpose in the author's study of cases and arranging of facts, but we are inclined to look upon them as scaffolding, neither ornamental nor useful when the edifice is completed. Some minor points are open to criticism. Thus, when considering appetite, Dr. Clouston firmly maintains "The absolute dependence of the appetite for food on brain and ganglionic integrity and sound working" and "that there is no need for physiological proof that appetite is a brain-function," and further he speaks of the ravenousness in diabetes as a brain-function. We must demur to this, as appetite surely is one of the very earliest essentials of life, existing primitively in chemical affinity and developed by necessity of life before any nervous elements exist.

As might be expected, all is clear and accurate in our author's consideration of the relationships of insanity to health and to other conditions of nervous disorder. Time is not wasted in referring to the methods of classifications and to nomenclature generally.

Dr. Clouston says that, at present, classification must be unscientific and incomplete, but the present methods of division are sufficiently practical.

A symptomatological division is used by Dr. Clouston, though he refers also to Dr. Skae's clinical classification, and gives fourteen subdivisions, chiefly depending on general or local causes for their names.

There is a very novel feature introduced at the end of Chapter I., in two parallel columns, in one of which we see the normal physiological brain-relations, and in the second the bearing of these on insanity. Although we cannot accept all the statements, they will prove helpful to the student, even when put in too unqualified a form.

Directions for examining patients are given, and are useful in lectures, but of little use in print. None can learn to examine patients from books; the *tactus eruditus* comes only from experience.

With characteristic cautions, advice is given as to getting a letter of indemnification where there is danger of legal trouble arising. Then one hundred pages follow on states of mental depression, melancholia (psychalgia), and the subject is well divided and fully considered. There is to our mind no necessity for a definition of the disease we are considering, but there is a tendency for the medical mind to conform to the lawyer's desire to have a definition. We have no right to define what nature has left indefinite. Dr. Clouston gives a definition of melancholia, and points out the distinction between melancholy and melancholia. This is necessary, but we do not want the definition.

His divisions of melancholia are: *a*, Simple; *b*, Hypochondriacal; *c*, Delusional; *d*, Excited (motor); *e*, Resistive (obstinate); *f*, Epileptiform; *g*, Organic (coarse brain disease); *h*, Suicidal and Homicidal.

The descriptions and the cases are as good and as graphically told as it is possible.

We do not agree with all the divisions, and think that many of the delusional melancholiacs ought to be placed among the hypochondriacs; and it seems to us that many more cases deserve to be placed under this last head than is usually done. There are certainly insane persons whose mental disorder is connected with exaggerated or perverted sensations derived from their viscera. Such persons may have general sensations, as that they are dying; or local, such as that their brains, their intestines, or their reproductive organs are wrong, and as such should be classed with hypochondriacs. It is rather startling to come across such an expression of opinion as the following about massage. "For the cure of some of the cases (of neurasthenia) a plan of treatment has been adopted, the most irrational that was ever conceived by the medical mind." We trust Dr. Clouston will fairly try massage on the first thorough-going cases of neurasthenia, and though fresh air and exercise are excellent when they can be enjoyed, there are some cases that we believe have gone so far, that massage alone can save them and restore them to fresh air.

The cases of visceral melancholia are interesting, but we do not attribute any value to pigmentation or even ap-

parent deficiency of nerve-cells in the solar plexus; these conditions may occur quite normally.

Special consideration of Section "F" leaves us in doubt about the genuineness of this as a distinct group. Cases of melancholia with epileptiform fits have been occasionally met with, and have hitherto been looked upon as cases of general paralysis with melancholic symptoms, or as cases of senile brain-wasting with convulsive seizures.

Notwithstanding the cases described, we still believe there is no distinct group of melancholic cases with fits. Dr. Clouston himself says: "If my views in regard to the special pathological entity of general paralysis had not been so definite, I should have been tempted, in looking at the brain-lesions in some of these convulsive cases, to have regarded the disease as an exceptional, localised, non-progressive, general paralysis." And we believe he will have to reconsider this position. The pathology of brain-softening depending on vessel-spasm, or on primary degeneration of neuroglia, apart from vessel-disease, is not satisfactory.

After the consideration of the groups of cases of melancholia, special symptoms are discussed: thus, suicidal and homicidal tendencies and refusal of food. Full directions are given as to feeding, and the nature of the food is described.

All points are discussed with most praiseworthy care and minuteness, and for melancholia in general our author has one golden rule. In his own words: "To them I preach the gospel of fatness, the gospel of fresh air, of healthy secular literature and active occupation, of iron and quinine and a little bromide of potassium when needed."

Mania is defined and divided into simple, acute, delusional, chronic, ephemeral, and suicidal.

Simple mania is considered fully as a distinct though slight perversion frequently affecting the moral side, and many cases of "moral insanity" are considered under this head. Dr. Clouston does not seem to accept a form of mania which has been called acute delirious mania, or typhomania. He speaks of the third *stage* of mania as that of delirious mania, and he says it does not often occur if the first two stages are properly treated. Mania from delusions is very shortly treated, and it seems hardly to have deserved special recognition. Chronic mania is considered next, and we are glad to see it placed here rather than among states of

mental weakness. There are, doubtless, some cases of talkative, destructive mania that are chronic, but instead of looking upon them as cases of simple acute mania which have become chronic, we believe they belong to a special class, and are chronic from the first.

The conditions of homicidal mania are discussed, and a graphic chart shows the ages at which mania, melancholia, and general paralysis are most common. Most valuable are the remarks on prophylaxis in mania, though we hardly agree with our author in thinking beef-tea or meat a poison for nervous children.

States of alternation, periodicity, and relapse are described in Chapter V., the periodicity of all vital functions being fully recognised. The pathology of these conditions is proved to be that of chronic insanity generally. Delusions and delusional insanity are next considered, the delusions of ignorance and faulty education being referred to, as well as the delusions of mental disorder. Monomania of grandeur is here examined into and exemplified, but it must suffice to say that the consideration of this subject, as well as those of mental enfeeblement and states of stupor, is clear and practical.

Chapter IX. on states of defective inhibition is one of great value. Under this head the insane diathesis is described, as well as impulsive insanity and affective insanity. Inhibition, like evolution and localisation, strongly appeals to our author, and he is careful to explain his ideas of its power. Dipsomania is here fully considered, and its many relationships to neuroses shown in twelve groups. We do not think the term "neurine-stimulant craving" either elegant or necessary. Good examples are given.

The section on kleptomania is short and to the point, though we think reference might have been made to the two varieties of this symptom—the one the mere collecting, as seen in the general paralytic; the other the result of moral insanity. Dr. Clouston accepts the facts of moral insanity as simply indisputable. "It is not a question" he says "of theory, but of fact," (p. 348). We will not now discuss the question as to whether the sense of right and wrong is, to a large extent, an innate brain-quality.

No author on insanity fails to recognise the importance of general paralysis of the insane, and most devote a large amount of space for its discussion. We think that Dr. Clouston has hardly done himself justice in giving only twenty-five pages to this all-important subject. What he

says is to the point, though we do not like his definition. Varieties as seen among these cases are not fully considered, though certain cases are described in which a special sense has failed first and the general paralysis has followed. These examples are rare, and in our opinion the mental, bodily, and special sense-changes go on simultaneously, although one may outstrip the other. Too low an estimate (3 or 4 per cent.) is given for melancholic general paralytics, and we do not agree in thinking the hypochondriacal symptoms can be explained frequently by visceral disease.

Many points, such as the relationship of nervous inheritance to general paralysis, are not discussed.

To Dr. Clouston there is one essential pathology for this disease. He thinks general paralysis is premature death of "the most important factor in mentalisation—in fact, the mind-tissue." He will not allow that anything akin to inflammation can be at the base of the disease.

The rest of the book takes into consideration the insanities associated with various physical states and bodily disorders, with poisoning by alcohol and the like, and also the mental disorders associated with the various periods of life.

The chapters on alcholic insanity and phthisical insanity are specially good.

The book is concluded by a chapter on the duties of medical men in relation to mental diseases. In this sound, useful, practical advice is given.

In closing this review, we feel that, long as this notice is, we have only skimmed over the surface of much that is deeply interesting and important.

The book is handily got up, and the plates are excellent. The student must not be surprised if he makes or sees a great many post-mortems of the insane before he meets with so well marked a pathological specimen as that which is represented in the first plate.

This is the best book, from a clinical point of view, at present published in Great Britain.

Body and Will. By HENRY MAUDSLEY, M.D. Kegan Paul, Trench, and Co. 1883.

Prolegomena and Ethics. By the late J. H. GREEN. Clarendon Press. 1883.

Anyone who wishes to realize in its clearest form the wide divergence of the materialist and idealist currents of English thought about mental problems cannot do better than read together the two remarkable books which we have bracketed for review. Their writers are typical of the schools they represent, and have arrived, each for himself, at perhaps the clearest and most logical theory to be deduced from their respective lines of argument. Yet their conclusions are, as nearly as may be, diametrically opposed; or, at least, they are on the face of them contradictory, and no clue as yet appears by which the contradiction may be solved or explained away.

Dr. Maudsley lands us, by a process which to him, and, doubtless, to most of his readers, seems obvious and inevitable, at the conclusion that mind and all its products are a function of matter, an outcome of interacting and combined atomic forces not essentially different in kind from the effervescence that follows a chemical combination or the explosion of a fulminate. It is a new form of force, more complex and wonderful than others; but yet the mathematical result of them, inevitably fated from the beginning—if there ever was a beginning—and fated to exist in this way and in no other; for the universe is bound in an iron net, and the picturesque phantasy of chance or choice is only the delusion of the fool.

Professor Green, summing up, before his unexpected and untimely death, the philosophical results of many years of hard and conscientious wrestling with the problems of German and English thought, announces to us, on the contrary, that nature and matter have no reality but as a function of that spiritual principle, which alone truly *is*, and which is manifest to our consciousness in the double aspects of thought and will. He does not in truth call it God, though perhaps the ordinary reader would follow his argument better if he did so. In any case, it is that which is neither matter nor the result of matter—which was not caused, but is free—which is in its essence un-subject to time or space, for it transcends and creates

them. In the universe, as we in our partial experience can come to know it, it is revealed to us as law—as reason manifest in order and harmonious interdependence of relations; for things are to the thinker only meeting-points of relation. In our own lives it is made manifest, not adequately nor all at once, but by a gradual development in which the rational, spiritual possibilities of our nature are at first latent or vague, though necessarily implied in all our conscious human life, and become by degrees, in the very work of knowing and experiencing, more fully realized and conscious of themselves. In the moral aspect of nature this spiritual principle is seen in the form of an imperative law, and therefore implies a freedom that is not possible to phenomena in the order of physical or natural causation. The existence of the absolute imperative of duty thus guarantees to us of itself that we are not atonic resultants, and that, whatever may befall us, we can never say that circumstances and not ourselves have made us what we are. If we are, in some as yet unexplained way, so limited in our spiritual growth and movement by the phenomena of organic and natural forces that they *seem* to govern our life, we are none the less endued with the power to make them the servants of our real selves, and by them to work out a destiny that is in the best sense free. Nor is there any divorce between this moral side of our being and that aspect of it which is commonly described as thought, or reason, or mind. For will is no *extra* quality or entity in human life, but is only reason going out in act, as thought or knowledge is reason taking in the data of nature, by which alone it is allowed to accomplish its own growth. What Mind, Reason, Spirit, Will might be if we could transcend the framework of space and time and think of it without the complications of brain and nerves, youth and age, sleep and disease, life and death—what God, in a word, may be—Professor Green does not profess to tell us. Indeed, his speculation is strangely modest, and he is almost too anxious to answer outside difficulties from the scientific and materialist standpoint, when it would have made his meaning easier if he had gone his own way boldly. But he tells us enough to allow any painstaking student fully to appreciate that point of view which, uncommon as it seems superficially to have become, is yet held powerfully, even in England. Dr. Maudsley is contemptuous about "metaphysics," and the barren heights of speculation. In a busy age like ours, with scientific work

of practical utility pressing on every hand for investigation and experiment, and with any number of interesting results, capable of being verified by weight and measure and exhibited by the electric light to admiring audiences, it is perhaps not wonderful that mere hard thinking, which is dry and difficult, and will never be understanded of the vulgar, should be at a discount. But for those who study Mental Science with an honest desire to solve problems the most momentous in the range of human effort, and especially for those whose practical work is along the borderland where mental and physical facts are inextricably tangled together, it may not be useless to remember, once in a way, that there are two views on the subject of the relation of Body and Mind, and that the idealists (to give them a misleading name) are not necessarily either ignorant or mad.

The special reason for bracketing Prof. Green with Dr. Maudsley is that he, at least, does not ignore the difficulties raised for the metaphysician by evolutionary biology. It may be worth while, perhaps, for clearness sake, to state at once his view of the relation between the spiritual and the material side of human life. After explaining at length his fundamental view that human experience, or knowledge, or self-consciousness, cannot be a part of the process of nature, since it is itself conscious of that process, and that the simplest chain of perceptions *is not* a series of phenomena, but implies necessarily "the existence of an eternal consciousness in man" as the basis of any and every mental act, he goes on to inquire how the presence of this eternal principle can be reconciled with the fact that our consciousness varies and grows in the lives of each of us, in apparent obedience to physical conditions of organism? "It seems," he says at p. 72, "to have a history in Time. It seems to vary from moment to moment. It apprehends processes of becoming in a manner which implies that past stages of the becoming are present to it as known facts; yet is it not itself coming to be what it has not been? It will be found, we believe, that this apparent state of the case can only be explained by supposing that in the growth of our experience, in the process of our education to know the world, an animal organism, which has its history in time, gradually becomes the vehicle of an eternally complete consciousness. What we call our mental history is not a history of this consciousness, which in itself can have no history,

but a history of the process by which the animal organism becomes its vehicle. 'Our consciousness' may mean either of two things: either a function of the animal organism, which is being made, gradually and with interruptions, a vehicle of the eternal consciousness, or that eternal consciousness itself, as making the animal organism its vehicle and subject to certain limitations in so doing, but retaining its essential characteristic as independent of Time, as the determinant of becoming which has not and does not itself become."

Dr. Maudsley will complain of this as being "words—mere words," and he may also complain that the words are not very easily understood; but if he and his school will give them their attention, they will, at least, not be able to say that that they do not state a tangible theory. Dr. Maudsley's own suggestion is in another direction. "The gulf between the conception of the movements of cerebral molecules and the self-consciousness of will-energy may well be due," he thinks at p. 101, "to the different ways of acquiring them. Molecular Action and Will may be one and the same event seen under different aspects, and to be known as such one day from a higher plane of knowledge. For if the object and the brain are alike pervaded by such a hyper-subtile ether; and if the impression which the particular object makes upon mind be then a sort of pattern of the mentiferous undulations as conditioned within it by its particular form and properties; and if the mind in turn be the mentiferous undulations as conditioned by the convoluted form and the exceedingly complicated and delicate structure of the brain, then it is plain we have eluded the impassable difficulty of conceiving the action of mind upon matter—the material upon the immaterial—which results from the notion of their entirely different natures." Is this theory any clearer than the other?

In fact, this theory does not really touch the point which the disciples of Prof. Green would put to Dr. Maudsley at all. If you could get outside your own mind and consciousness and percipient thought—if you could once effect the *salto mortale* from my notion of things, phenomena, facts—call them what you will—to objects or facts outside and independent of all consciousness or perception, then the materialist might get under way, and with ingenious theories of this kind might explain much. But how is he to leap off

his own shadow? What is a fact? How can he ever dissociate an object, however apparently independent of his personal control, from the one necessary condition that it must, as far as he knows or ever can know it, have been cast in the mounds of human thought and knowledge? Everything he ever heard or saw, or knew by reading, or imagined by recombining the elements of his remembered perceptions, is a "fiction of his mind," in some sense, if not in Hume's. He may picture to himself a glacial landscape with its appropriate fauna, and no man visible. Yet neither ice, nor animals, nor earth, nor air, nor time, nor space, are or could be anything if consciousness or mind could be supposed annihilated out of the universe of being. The very talk of a universe, of being—of *nothing*, if you will—implies and involves a conscious mind to which these notions are related. It is not necessarily my mind or yours—it may not be necessarily any individual or limited intelligence such as we know among ourselves—but Mind, as such, somewhere and somehow, is a condition precedent of the existence of anything. Let a man try to think the universe back to the nakedest of beginnings—to a diffused nebula of atoms equal and indifferent in everything except their distances from one another, and already he will find, if he thinks it out, that a hundred categories are involved in its picture which *are* mind, and are as unthinkable, apart from mind, as a poem or a syllogism.

To return, however, from this rather fundamental criticism. It is, of course, to be recognised by all that for all the practical problems of Mental Science as it is applied in pathology, in education, in civilization, in a thousand forms, it is bound to take strict account at every step of the physical concomitants of consciousness; and is, indeed, more concerned with these than with the idealist side of things, however true that in itself may be. In this aspect, nothing could be better than the third part of Dr. Maudsley's book on "Will in its Pathological Relations," although, even there, he is terribly polemical. But we must reserve what we have to say of it, and of the singular Hymn of Pessimism with which it closes, for another number.

Behandlung der Psychosen mit Elektricität. Von Dr. Tigges, in Sachsenberg (Zeitschrift für Psychiatrie, xxxiv., Band, 6 Heft).

(Concluded from Oct., 1883.*)*

In a recent number (Oct., 1883) we reviewed part of Dr. Tigges's article, and we now proceed to notice briefly the remaining portion.

Dr. Tigges describes one patient afflicted with chronic mania with delusions who had sounds in the ears. The electrode applied in front of the auditory meatus caused the sounds to become less audible, sometimes to cease entirely. When the anode was applied to the forehead, and the kathode to the neck beneath the occiput, the sounds were lessened; by filling the ear with water, and placing the opposite poles alternately in the ear, they were made to disappear. Another patient had melancholia with delusions. She had a variety of sounds in the ear, with voices telling her, amongst other things, that she could not die. The application of galvanism caused a complete cessation of these abnormal sounds, but the voices came back sometimes in from half-an-hour to seven hours after the application. After the voices returned, the knocking was again heard in the ear, whilst the murmurs, ringing, and other sounds were later in recurring. In a case of insanity there were subjective noises which had endured for three years. Under the constant current they almost disappeared, whilst the murmurs in the ear were still heard.

Dr. Tigges found that in the greater number of cases treated the sounds in the ear either totally disappeared or became much fainter. Less frequently the only change observed was an alteration in the quality of the sounds, or they passed to the other ear. Sometimes they promptly returned after the sitting, sometimes they came back the following day; but, by continuing the treatment, the murmurs in the ears either disappeared or became much less. Occasionally the hallucinations of hearing disappeared along with the sounds in the ear; but the one might come back without the other, or the sounds would disappear, leaving the voices. In one case, with vocal hallucinations there were no subjective sounds, and the voices disappeared at the first application. In many cases, which he does not detail, Tigges tells us that he found the effect of electricity upon

the sounds in the ear to be little marked, and the hallucinations of hearing not to be affected at all. When there were organic lesions of the ear accompanied by voices little improvement was effected. In these cases he was able to make out "Brenner's sound-reaction," which he had failed to do with patients who had noises in the ears without any organic lesion. Brenner found, as explained in a former Retrospect, that a sensation of hearing was excited when the chain was closed if the kathode was placed in the ear, or near the ear; but when the anode was applied the sensation of hearing was only produced by the opening of the chain.

Dr. Tigges treated some cases of melancholia with apathy, passing into melancholia with stupor, by passing the constant current through the brain; more rarely the interrupted current was used. He was not able to make out clearly on what spots it was best to apply the electrodes. Sometimes one method of placing them was found to do well, and then its efficacy seemed to pass away for another location. Currents were passed through the head, or the sympathetics of the neck were acted upon, or the electrodes were placed on the neck and over the dorsal vertebræ. He found that by such treatment the motor rigidity was relaxed, and the sensibility to pain appeared to be increased; the patient became more lively and less averse to talk. Sometimes this favourable influence soon passed away, sometimes it was more enduring. In one case the increased liveliness lasted for two months. With another patient marked improvement began after twelve days' treatment, and in eighty days all the uneasy sensations disappeared. This was a lad of eighteen, suffering from headache, sounds in the ears, nightly hallucinations, melancholy, and loss of memory. He had been in the asylum for six months without any improvement until the electric treatment was begun. This is the only cure recorded. In another case there was great improvement. In six more there was amelioration of the symptoms without any decided effect on the general character of the disease. Two patients died while under treatment. Dr. Tigges does not describe or tabulate all his cases, but selects such instances as he deems will illustrate his remarks. He is inclined to believe that some of the results observed to follow the treatment, such as the cessation of pains in various parts of the body, are of a reflex character; but where this improvement has followed

application of the electrode to the parts around the ear, he thinks that it must be due to the current passing through the sensory or motor centres of the hemispheres.

Lectures on the Localisation of Cerebral and Spinal Diseases. By PROFESSOR CHARCOT. Translated and Edited by WALTER B. HADDEN, M.D.Lond. The New Sydenham Society. 1883.

This work is marked by the usual characteristics of M. Charcot's observations—original research, remarkable insight, and those powers of generalisation and of expression which are essential to a successful teacher. As he truly says of himself, he is no believer in the efficacy of generalities deprived of their material substratum. On no subject is the Professor more at home than on the localisation of cerebral diseases, and every clinical student of pathology must be glad to have such a guide in the fascinating study of the regional diagnosis of affections of the brain. M. Charcot's nomenclature is always precise and well defined—an essential requisite in this field of research, but one not sufficiently recognised, or at least acted upon, by many physicians. We could have wished that the same desire to be lucid had induced him to adopt the practice of labeling the regions themselves, in the plates, instead of following the customary but troublesome course of reference letters. This really involves the reader's translation of a language of signs instead of seeing the names of the various regions at a glance.

The early lectures give a rapid but clear sketch of the topography and microscopical appearances of the healthy brain. Then follows a description of lesions in the encephalon and cord. Lectures V.—IX. are devoted to the arterial circulation of the cerebrum, and the central grey nuclei and their lesions. Cerebral hemi-anæsthesia, crossed amblyopia, and lateral hemiopia form the subjects of the tenth lecture, and secondary degenerations of the eleventh. This completes Part First of the book. The Second Part is devoted to Spinal Localisations, and contains a vast amount of information in a small compass. We do not attempt to give a detailed notice of M. Charcot's views and descriptions. Our object in this short notice will be secured if we induce our readers to possess themselves of the work itself. It is well translated by Dr. Hadden, whose notes and introductory re-

marks are decidedly useful. We congratulate the Sydenham Society on having added so valuable a book to their series, and on having secured so competent and sympathetic a translator—one so thoroughly *en rapport* with the author, and *au courant* with the matter of which the book treats. M. Charcot's treatises have long been favourites with English physicians, and the one under review will not, we venture to say, be the least appreciated.

The Pedigree of Disease. By JONATHAN HUTCHINSON, F.R.S. London: J. and A. Churchill. 1884. (First notice.)

We have here, we are told in the prefatory note, a reprint of the author's lectures delivered in 1881 at the Royal College of Surgeons. The purpose of the book must be read in the hope expressed by the author, "that these lectures may be found to *point* in the right direction." More than this is not possible within the compass of some hundred and odd pages, when the subjects dealt with have, as here, such wide bearings. What are these subjects, and what is the direction indicated to us? To many we fear the path may seem a backward one, which again brings us in view of those questions vexed—some of us had hoped, buried—which so long busied the minds of our predecessors. The words temperament, diathesis, idiosyncrasy, bring back a medicine of the past, recall ages dark with humours and vapours which clogged the senses, and which the light of modern science should have dispersed, but which, perhaps, she did but cast into the shade; for it may be that a clearer vision will enable us to penetrate these shades, and there discern the outlines of disconsolates, yet claiming at our hands either decent burial or restoration to the light of day.

Let us look, then, in the direction indicated, and, leaving metaphor, approach our task in plain, nineteenth century fashion. And first, this *temperament*—what is it?

The author's definition is: "The sum of the physical peculiarities of an individual, exclusive of all definite tendencies to disease." Stress is laid on the excluding clause as an essential in this definition, it being insisted that temperament thus defined has nothing whatever to do with disease—it is *physiological*, not *pathological*. It would be impossible, perhaps, to improve on Dr. Laycock's definition of temperament; Mr. Hutchinson thus quotes it: The

temperaments are "fundamental modes of vital activity peculiar to individuals." Note, however, that, whilst consistent with health, the temperament impresses its own features on disease. If we might be allowed the simile, we would enforce this by comparing temperament to the allotropic state of the chemist. Thus, *e. g.*, phosphorus in its uncombined state is known to us both as *clear* phosphorus and as *red* phosphorus. In either state it is phosphorus, no more, no less. But how different the fundamental modes of activity of these two forms; and, granting that they should be placed under conditions which, arbitrarily, we defined as abnormal, how different the reaction in the two cases; in other words, how different the manifestation of the disease. Concerning these two forms of phosphorus, be it said, in passing, that *red* phosphorus would take rank among the temperaments as *lymphatic* phosphorus.

With the word diathesis we at once enter the domain of pathology. The organism now shows, however it has acquired it, a proclivity to disease; each diathesis corresponding to a special type of disease. The author points out that this proclivity persists through long periods, usually throughout the life of the individual; further, that it may be inherited, or it may be acquired. The order of statement and the mode might, we think, in respect of the last, be with advantage altered to: it may be acquired, it will be inherited; for what is the relation of the offspring to the parents but bone of their bone, flesh of their flesh, type of their type?

Temperament and diathesis thus defined, Mr. Hutchinson proceeds to discuss the criteria of temperament. This is one of the most important parts of the book, though the results obtained are not very encouraging, being of a negative rather than of a positive character. We are told that "so long as health exists" the data as to temperament are exceedingly untrustworthy; and yet it is in health that temperament must be studied, else an already very complex problem is yet further complicated by the admission of new factors. Did the older observers escape this danger? The author thinks not; and he points to the very names of the *temperaments* as they have been transmitted to us as indicating the presence of the morbid element. Thus, selecting from Dr. Laycock's classification of the temperaments "the last and certainly by far the best attempt at classification," we are presented with the bilious and melancholic temperaments, both of which Mr. Hutchinson thinks are but different degrees of the same

thing, and very apt to pass the one into the other, as life advances; and, yet more to the point, that the distinguishing feature in either "is one which concerns disease rather than temperament," and "that it might be more conveniently known as the hepatic diathesis."

Returning to the question of the untrustworthiness of the data as to the temperament, and avoiding all confusion with diathesis, the author states it as his belief that we have "but little to guide us in a classification excepting the conditions which go to make up what we mean by complexion." By complexion, it is true, we mean something more than mere degree of pigmentation; thus "the state of the skin as regards thickness, thinness, or transparency, and the various degrees of freedom of distribution of blood in the capillaries of the face," all these are included in the word complexion; and yet, for all this, it is probably true that pigmentation is that on which we rely almost solely in our classification. Mr. Hutchinson brings this home to us by putting the question—Could you make the distinction of the temperaments among a highly pigmented race, as, for example, among the negroes? Very possibly this question might have to be answered in the negative; but we would caution against hasty opinion here, for every day we are strengthened in the conviction that we see what we look for. This cannot be better illustrated than by family likeness. This is always far better appreciated by the outside world than by the family circle. And why? The outside world seeks to group together, to classify, and it finds likeness; but in the family circle the question is how to dissociate or individualize, and accordingly unlikeness is found. With this warning, let us well consider the question put to us by Mr. Hutchinson, and also admit the cogency of the argument which dwells at some length on the subject of climate and pigmentation, and on what may be termed the accidental nature of this latter.

As the argument stands, then, in relation to classification by temperament, certain of the older terms employed would involve the fallacy of pointing to diathesis rather than to temperament, whilst certain others would appear to rest on a basis accidental rather than essential. How, then, are we to discover the several "fundamental modes of vital activity?" for Mr. Hutchinson nothing doubts their existence, though he thus disparages existing criteria. Will race serve us? Will a British ethnology—on the need for which we are told Dr. Laycock insisted—will such yield a means of

classifying? The author is cautious on this subject, and, though of opinion that race would prove a more reliable guide than any yet available, still is not sanguine of the practical results to be thus gained. This must become at once apparent when we consider the accomplished fact of the intermixture of the races. But we would suggest on this question of race and of family, both of which signify for us *heredity*, whether we are not losing sight of the real object we have in view, which is to discover the outward and visible signs of an inward and hidden activity. It surely is but jumping the difficulty, or admitting incompetence, to tell us that certain modes of vital activity have a father and mother (family) or a long train of ancestors with a vanishing point in obscurity (race). Both of these facts we shall learn, if we do but push our enquiries sufficiently diligently, and in this our search we need never even pause to gaze at the individual before us. But if we be reminded that likeness runs in family and in race, we would answer—Yes, but do we make use of it? Suppose, for instance, two patients present themselves, the one with decided Jewish cast of countenance, the other moulded on no such type, and that enquiry elicits a Jewish lineage for this latter, but none such for the former. What then? According to which of the data before you, will you classify? As we read Mr. Hutchinson we should here rely on the history, and most probably we should be right in so doing, but let us recognize clearly that in so doing we proclaim the worthlessness of external conformation as revealing temperament. It is in view of this, and of the inextricable complexity of the subject, that Mr. Hutchinson, in conclusion, suggests the actual abolition of the word *temperament*. Is this advisable? Let us in the first place remember that the word has obtained a deep hold amongst us, and that it stands to us for *something*—let us admit that this *something* is vague in the extreme, and that the paths by which we would approach to a clearer recognition are truly labyrinthine. But if we are to discard the vague, what will remain to us in medicine? and if for fear of deviating we are to halt, how many will be the quests that we shall undertake? Much of harm results from the view not unprevalent amongst us, that the vague and the false are synonymous, whereas they bear no relation one to the other. The vague signifies the indefinite, and the indefinite results, not from error on the side of the thing defined, but from defect on the part of the definer. As it would seem to

us, our duty would be to let stand the "temperament," but to discard the "temperaments" as they have been handed down to us—to carefully avoid confusing diathesis with temperament and to beware of basing any distinctions on mere accidental features—such as, perhaps, degree of pigmentation may prove to be. Finally, to make use of "race" if possible, fully recognizing the while that this is but the crutch we look forward to throwing away in the future of a more definite biology.

With regard to diathesis, we tread surer ground, and, to quote the author, "We can study the result of causes in detail and with much precision," and "we can express our knowledge in clear terms." . . . "It is in this direction that the work of the future will be done," thinks Mr. Hutchinson. No doubt, more immediately; this accomplished, we shall hope for the further step in the direction of temperament.

We have not thought fit to apologise for the introduction into a Journal of Mental Science of the above considerations; lest, however, any should be inclined to question the propriety of this, we would, in defence, only point to the definition of temperament here accepted, viz., "a fundamental mode of vital activity." That the activity of our nervous system, as a whole, is here included, none can doubt; can anyone doubt that, included equally, is the working of certain more highly differentiated parts of this system?

H. S.

Science du Cœur Humain ou la Psychologie des Passions d'après les Œuvres de Molière. Par Dr. Prosper Despine. Paris: F. Savy. 1884.

The idea of a psychological study of a great writer is, as far as we know, novel, and is certainly not without scientific interest. In the book before us Dr. Despine has carefully gone through the works of Molière with the view of bringing out what he calls the Philosophy of the Passions contained in his dramatic works. Of the two forms of mental science—that which concerns itself with the intellect and that which treats more specially of those instinctive manifestations which are found in the history of human sentiment or passion—there are plausible reasons for maintaining, as Dr. Despine does, that the second is not the less impor-

tant. From that point of view mental science has, perhaps, been remiss in devoting so little attention to the scientific and inductive study of the emotional side of human life, and it certainly has much to gain from a careful and competent study of the great dramatists of the world. Both tragedy and comedy, though in different senses, contain in them what may not inaptly be styled a kind of mental pathology. Both are concerned with aberrations from the normal development of human life. In Comedy, the foibles and follies of humanity are held up for the amusement of the audience, and the interest of the play depends on the fact that the actions represented, without being in truth improbable, are yet so far out of the normal course as to be incongruous and absurd. In Tragedy, on the other hand, the interest of the action depends upon an intense excitement arising out of the play of passions developed to a morbid intensity. The laughter on the one hand, and the awe on the other, are equally indications that we are being presented with a development of life which is passing beyond the beaten tracks of common-sense and sanity, and adventuring into the region that may be called the debatable land between madness and mental equilibrium.

For these reasons it is not out of place in this Journal to welcome the work of Dr. Despine as a contribution to the pathology of mind. Molière's characters are not madmen, but they are not precisely sane. The author has bestowed admirable care and judgment upon his work, and the book is one which will be read with great interest both by the literary lovers of Molière himself and by those who seek suggestions of a scientific kind. If there is anything we would be inclined to regret, it is that the author insists too much upon the moralizing remarks which abound in Molière as in every writer of his time, and attaches sometimes too much importance to what was probably little more than an ornamental flourish of rhetorical sentiment. We cannot help wishing, however, that some student at once of literature and of psychology would do for Shakespeare the same service that Dr. Despine has done for the greatest of the French dramatists. Without depreciating Molière, it may be fairly maintained that there is much more true humanity in both the comic and the tragic portions of the Shakesperian plays. A serious study of the philosophy of human action and passion, as it is shown in the characters of Lear, Hamlet, Othello, Antony, Lady Macbeth, Prospero, Falstaff,

(supplementing Dr. Bucknill's work), could not fail to be of use. Probably no one could deal with the task so well as one whose practice and study had been concerned with mental pathology. If such a writer wished to do a real service to science and literature alike, he could not do better than imitate the diligence with which Dr. Despine has collated every scene and line in which the characters and idiosyncracies of the leading actors are brought out. The labour will not be wasted, for it is the secret of a world-writer that it may be said of him, as Dr. Despine says of Molière, that "since he depicts the passions general to humanity, his writings will be for all time."

Handbuch der Gerichtlichen Medicin, &c. Von Dr. Hermann Kornfeld. Stuttgart: Ferdinand Enke. 1884.

This book unfortunately does not adapt itself for review in a journal of psychology; with the best intentions it is not possible to find material for criticism. It is the usual handbook of forensic medicine, in which the several modes of death and their respective signs find consideration. Pregnancy and its allied subjects receive their due, and in a short chapter the subject of life-assurance is dealt with. In the hope that something available might be forthcoming, we turned to the chapter on simulated diseases, but in a page or a page and a half epilepsy, catalepsy, somnambulism, and contractures are despatched. Again, in the chapter on toxicology, which is a long one, we had hoped to find the nervous sypmtoms which attend the administration of certain drugs somewhat more fully considered. Of course these are matters of great interest to the psychologist, but they are not dwelt upon sufficiently to admit of separate consideration here. The chapter on unsoundness of mind extends over only forty pages, whilst the book records its six hundredth page. It will be seen from this that Dr. Kornfeld has by no means developed this section specially. This chapter is very largely made up of legal considerations, which are simply recorded as matters of fact, not being discussed in their bearings or fundamental principles. This, no doubt, will serve the purpose of the student who is asked for a fact and not for a reason, and it must not be supposed that we are finding fault with the book for not discussing these problems; we are but explaining our inability to criticize. The

book would seem to be well adapted to meet the requirements of the student; it is illustrated by some fifty wood cuts, which for the most part appear well executed. We must, however, make an exception in respect of the cut representing the teeth of inherited syphilis as described by Mr. Hutchinson. In conclusion, we must express our regret that the nature of the subject-matter has precluded more detailed examination of a work written by a Corresponding Member of our Association, sent to us for review.

H. S.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *English Retrospect.*

Asylum Reports.

(*Continued from p.* 129.)

Ipswich.—Out of 67 admissions, no fewer than four were found by Dr. Chevallier to be not insane. One of these was a re-admission, and was discharged the next day; but in the others their condition "was such as to justify the belief, on the part of those instrumental in depriving them of their liberty, that they were of unsound mind."

When the Commissioners paid their official visit there were 118 males and 152 females resident; 98 of the former and 100 of the latter were confined to the airing-courts. Only 52 men go weekly beyond the grounds, and 35 women take exercise in them. The Commissioners appear to be justified in considering this amount of exercise, especially for the women, quite inadequate.

Kent, Barming Heath.—It is very creditable to the management that in every case of death an examination of the body was made. How Dr. Davies succeeds so well must be a mystery to many asylum-superintendents, who, charm they never so wisely, receive the necessary permission in from 50 to 75 per cent. of the deaths only.

The admissions were very numerous, and included many incurable cases from workhouses. In connection with this subject, Dr. Davies says :—"I am convinced that, apart from overcrowding, these patients exercise an injurious influence upon those whose disorders are of an acute and consequently more curable nature. I think, therefore, that, in the long run, it would be cheaper for the Guardians to provide suitable accommodation for them in the workhouses, and forego the present advantage of the grant in aid, when in an asylum. It is, however, almost impossible to get this view adopted in the right quarters, so that the only hope left is that the Government will, at no distant date, reconsider this grant, and dispose of it in a less objectionable

way. If a change of some sort is not made soon, the question of providing increased asylum-accommodation will once more force itself upon your notice, as, despite every care upon my part, we are unduly full."

Two male attendants were seriously assaulted by patients who had been considered harmless up to the dates of the attacks.

Kent, Chartham Downs.—The information contained in this report is not burdensome. It has no report presented by the Visitors to the Court of Quarter Sessions, no report by the Commissioners, and but one by the Medical Superintendent, which is very brief indeed when it is remembered that there were 771 patients resident during the year.

Killarney.—It is satisfactory to find that the statistical tables recommended by our Association have been largely adopted by the Irish Commissioners and Superintendents.

The following remarks by Dr. Woods are interesting :—"While referring to the causation of insanity, I cannot help noting the return, as shown in Table XII., of the social condition of the admissions, discharges, and deaths ; for while 58 per cent. of the admissions are single, only 36 per cent. of the recoveries are single ; and while only 36 per cent. of the admissions are married, 55 per cent. of those discharged are married ; or, in other words, at this rate 77 out of every 100 married patients would be discharged recovered, while there would be only 36 out of every 100 single. This result I have noticed for some years, but I will not at present draw any definite conclusions. Some will think that there are far more single people in the population than married ; the reverse, however, is the case, the last census returns showing that Kerry had a greater population of married people than any county in Ireland, 43 per cent. of the people between 15 and 45 being married, while only 24 per cent. never married. I believe that early marriages have of late years been much more frequent, and it is quite possible that regular living and other causes may combine to make the social condition have a greater effect on insanity than some are at present inclined to think."

Lancashire, Lancaster.—Dr. Cassidy again expresses his determination to try the open-door system. He says :—"The principal addition has, of course, been the Annexe Asylum, which is now being rapidly got ready for occupation ; and I may take the opportunity of stating that it is fully adapted and equipped for the most recent modes of treatment, those, namely, so ably and forcibly described by the Lunacy Commissioners for Scotland in one of the most interesting of their always valuable reports—the 23rd. No one, I think, can read this account of the open-door and industrial system, and of its results in Scotland, without feeling that there would be a failure at least in courage and energy, if not in duty, not to give it a fair trial in England. The scale on which we shall try it is a greater than has yet been applied to it, and the difficulties to contemplate and,

perhaps, encounter, are, I fear, greater in this country than in Scotland. It will be time enough, however, to enlarge on this aspect of the question when the occasion comes. In the meantime there are no airing-courts, all the doors have ordinary handles, work is abundant and close at hand; and these, with careful supervision and willing assistants, seem to be the essential requisites for carrying out this system."

We acknowledge to a feeling of impatience to learn the result of this experiment, honestly judged in all its bearings; and in the meantime willingly admit Dr. Cassidy's courage and enterprise in taking it in hand.

Lancashire, Prestwich.—The official report on the condition of this asylum is again exceedingly favourable; the Commissioners remarking that it is, in the way of ward-decoration and embellishment, in advance of most, if not all, other English asylums. It is suggested that the amount of exercise beyond the airing-courts should be increased.

Lancashire, Rainhill.—The larger portion of Dr. Rogers' report is devoted to the consideration of the improvements effected in asylum-management during the 25 years he has had the direction of Rainhill. These remarks will interest lay readers especially and physicians not engaged in our speciality.

Lancashire, Whittingham.—The following paragraph from the Commissioners' report is very instructive:—"Among recent admissions is a man named John Ward, received here on the 13th instant from Preston Prison by order of the Secretary of State, and suffering from mania with general paralysis, and having well-marked delusions. He complained to us of having been flogged in Lancaster Castle, after his conviction at Lancaster on January 2nd ultimo, and the marks on his back, now becoming faint, show that his story is true. We can only suppose that the prison surgeon failed to recognise the man's insanity, some of the characteristics of which are now, and no doubt were then, dirty and destructive habits." Such an occurrence shows how necessary it is that prisoners, especially those whose mental condition should be the subject of accurate observation, should be under the supervision of medical officers thoroughly familiar with mental disease. It cannot be doubted that insane prisoners are sometimes most unjustly punished for breaches of discipline; but what is worse, others, awaiting trial, are not subjected to that thorough examination which would lay bare the mental disease which ended in crime, and thus wretches are condemned for offences for which they are not responsible. The suggestions made by Dr. Orange in his Presidential Address derive additional force from such occurrences.

The admissions during the year were 631. One half of these were transfers from other asylums or from large workhouses, and they probably constituted, Dr. Wallis remarks, the worst collection of

cases, as regards their curability, ever admitted into a public asylum in a similar period. Among them were 135 epileptics, 76 general paralytics, 31 idiots, and many cases of senile dementia and other forms of incurable brain-disease. These figures are sufficient to show the extremely arduous charge Dr. Wallis has, and it is greatly to his credit that he has his asylum in such excellent order as appears from the Commissioners' report.

Leicester and Rutland.—The charity connected with this asylum appears to do really useful work. One patient was boarded at 1s. per week, four at 2s. 6d., one at 3s., one at 4s., 12 at 5s., 15 at 10s., and four at 15s.

Of 469 patients, 237 males and 232 females, only three were general paralytics. This number must be regarded as very small.

For the present all intention to build a new asylum appears to be abandoned.

In pointing out the dreariness of the airing-court in which the more turbulent women exercise, the Commissioners recommend the experiment of taking even the worst inmates into the front grounds. Of the 46 inmates of the ward, some 30 at least never go beyond the airing-court. This is a most important point in asylum-management, yet too often not thoroughly attended to. For female patients especially airing-courts are most injurious.

Leicester, Borough.—This asylum is being enlarged by the addition of accommodation for 60 male patients.

Four of the female wards are now heated by steam.

Beer to a great extent has been discontinued as an article of diet, and tea and coffee substituted. The change has worked well. Application was made by the nurses to have a money-allowance in lieu of beer. The Committee decided to allow any attendant, nurse, or servant to have either the ordinary allowance of ale or an equivalent in money, and 31 members of the staff immediately availed themselves of the money-allowance.

Here also the Commissioners advise exercise beyond the airing-courts for all patients who are not too feeble in bodily health. They find that 80 male and 64 female patients never go beyond the airing-courts.

Limerick.—Various improvements continue to be effected in this asylum.

As an illustration of either national or religious prejudice, it may be noted that out of 32 deaths Dr. Courtenay succeeded in only two cases in obtaining permission to make a post-mortem examination.

Lincolnshire.—The recent additions to the accommodation are fully occupied, and the Visitors find themselves called upon to consider further enlargements.

We may reproduce Dr. Palmer's remarks on the effects of the Capitation Grant—that vexed subject about which we hear so many and so contradictory statements.

"As having a direct bearing on the increase of admission, independently of cases sent directly from workhouses, it should also be stated that the number of patients whose maintenance is defrayed wholly or in part by friends has become much larger since the Capitation Grant in 1874, and that many patients who would formerly have been taken care of at home are now maintained in the asylum without any charge on the poor-rate, or, as may possibly occur in some cases, with an absolute gain of the four shillings a-week allowed by Government. The county rate, however, has to bear an increased burden out of all proportion to the relief thus afforded to the poor-rate, in consequence of the increased demand for asylum accommodation which necessarily follows. Moreover, as the weekly rate charged to the unions includes only the maintenance-expenses, the cost of lodging (constituting the fabric expenses) becomes a needless gratuity to the friends in all cases where they can afford to pay both. Such patients form an intermediate class between the pauper and private, and at present the charges in lunatic hospitals are not sufficiently low to divert them from the county asylums. At the same time, as the population of the county grows very slowly, and as the returns from other unions show that the total number of its pauper lunatics has increased but little for some years past, it may be inferred that if a liberal and suitable dietary, with a good sound system of nursing, prevailed in the imbecile wards of the workhouses, and if a judicious amount of properly-selected and properly-applied outdoor relief were allowed amongst the poorer class for the home-care of persons of weak and unstable minds, the admissions would be so far diminished that there would be no urgency for extensive additions to the asylum." These practical remarks are well worthy of attention.

Dr. Palmer reproduces some of the suggestions made by our Association, in prospect of the introduction of a County Government Bill.

London, City of.—The percentage of deaths on the average number resident is again remarkably low, namely, 4·2.

In his report Dr. Jepson mentions a case illustrating a fact sometimes lost sight of, that chronic patients are not always to be trusted, and that we may be deceived by the apparently most trustworthy and harmless. "A patient—one of the first admitted in April, 1866—who had for some years previous resided in one of the Metropolitan private asylums, being chargeable to the Corporation of London, and who was the most trusted inmate in this institution, attempted to commit suicide by cutting his throat, while in bed, with a portion of an old jagged knife he had in some way obtained possession of. The act was observed by another patient, who raised an alarm. The incision severed the anterior wall of the windpipe, but no important vessels were injured. The wound soon healed, and the patient made a good recovery. The reason he gave for making the attempt upon his life was that, 'after thinking about it for some time, he had come to the conclusion, if he could not have a better head than the

one he possessed, he had better cut it off, since it was good for so little.' He had some little time before lost the use of an eye through a violent attack of iritis, and this illness was followed by a very short attack of excitement, the first manifested during the 16 years he had been in the asylum."

The Commissioners direct attention to the frequent changes in the staff, and suggest that the wages are insufficient. They say :—" Including laundrymaids and the head-attendants on each side, they number 32 in all ; more than half have not yet been in service here for 12 months, whilst only 10 have been here for more than two years. There are 11 day-nurses, two night-nurses, and three laundry-maids, and yet since our colleagues inspected this asylum last year no less than 22 nurses have left." Such a state of affairs must be a constant anxiety to the medical superintendent.

Middlesex, Banstead.—This great asylum has been further enlarged by the opening of two blocks for 78 patients each. The total accommodation is for 1,882—710 men and 1,172 women.

Dr. Shaw gives an example, if such were needed, of the great benefit resulting from employment. The patient was a very powerfully-built man, sent from a workhouse, where he had been extremely violent and unmanageable. " When admitted he said he should be quiet if he had plenty of work to do ; so we set him to work at the gas-factory, and he has been since his admission as hard-working and well-behaved a patient as any in the place. Epileptics (of whom we have large numbers) would be much benefited by regular and laborious work ; but it is not so easy to find it for them, as they cannot always be trusted with spades and forks, and thus farm-work is to a great extent put out of their reach ; for them we find pulling a heavy roller, or hauling carts, the best exercise. It is a pity that the female patients cannot be employed in the same way, for their attacks of insanity are of longer duration than those of the men, and we have not the same means of withdrawing them from their morbid ideas."

Middlesex, Hanwell.—We agree with the Commissioners that the lot of foreigners in our county asylums is a hard one, and that the representatives of foreign Governments show unwillingness to exert themselves to get their countrymen sent home. This, in great part, arises from the fact that there is great difficulty in recovering the costs. We have even known a case where a Consul had to pay the whole expenses because of his omission of some technicality. Now that the subject has been taken up by the Association, we hope that something will be done.

Mid-Lothian and Peebles.—As this is an asylum where the open-door system has been in use for some time, we are tempted to give the following remarks by Dr. Cameron on asylum-management :—

" The open-door system has been in full operation for several years in this asylum ; but as it is yet on its trial, and by no means generally

accepted by asylum-superintendents as practicable, except under certain favourable circumstances, it may be well that I should say a few words regarding my experience of it. Naturally, the first question that is suggested is: Have escapes been more numerous than under the old system of locked doors? and I have to answer in the negative. Again, as regards accidents, while there have happily been comparatively few, I regret to have to record the death of two patients by suicide within the last few years. Reference is made to these accidents in the reports of the Visiting Commissioners. They were in no way due to the open doors, but were such as probably no precautions in the way of locks or walls would be likely to prevent. . . .

"There need not necessarily be more than the usual proportion of attendants to patients. But there can be no doubt that the responsibilities thrown on the staff are increased, and that the attendants are forced to be constant in their attention, and to do by irksome personal supervision what could be done in a much more simple and perfunctory manner by turning a key. The unremitting attention which they receive, taken in conjunction with a liberal dietary, and opportunities such as the farm affords for outdoor labour, produces a degree of contentment among the patients which is quite apparent, and the result of which is the rendering possible of an experiment in the reduction of restraint that might at first sight appear impracticable."

Montrose.—The important alterations and improvement, begun some six years ago, are approaching completion.

This asylum has now been in existence 100 years. It originated in the benevolence and wisdom of the inhabitants of Montrose and neighbourhood, and was the first public hospital in Scotland devoted to the treatment of the insane.

Apropos of the changes which have occurred in the treatment of insanity during the last 100 years, Dr. Howden remarks:—

"No one, I imagine, will dispute the improvement which has taken place in the modes of treatment of the insane during the last 100 years; but in criticising methods we must avoid glorifying ourselves at the cost of our ancestors. We have every reason to know that the motives which dictated the use of the cell, the strait-jacket, and such like appliances, were pure and humane, and that these were as honestly thought to be the best means of treatment, just as we now think that ample occupation, exercise, fresh air, healthy surroundings, good diet, and the abolition, as far as possible, of all mechanical or even personal restraint are most conducive to the happiness and recovery of the mentally afflicted. In comparing the past with the present, we must likewise consider the totally altered character of the population of modern asylums. When there were only one or two asylums in the whole of Scotland it could only have been the most violent and unmanageable that found admission, and it is very probable that there were as many cases of this kind in the old asylum with its

30 beds as there are now at Sunnyside with its 500. The fact that we find often in the old minutes applications made, not for admission of a patient, but for 'a cell when there is one vacant,' speaks for itself. In the present day our share of maniacal excitement is, as it were, diluted by scores of quiet, industrious, and harmless persons, labouring under the milder forms of mental alienation, who, if they would ever have been admitted into an asylum 70 or 80 years ago, would certainly not have been placed in cells or strait-jackets. Thus it seems to me we are comparing two things totally different; and though no one holds more strongly than I do the advantages of our modern and more enlightened system of treatment, I cannot help thinking that it has to some extent been brought about and rendered more practicable by the milder nature of the forms of insanity of our average population; and I am not by any means sure that the Sunnyside Asylum could be conducted as it is now if it contained 500 patients of the same character as that of the small number who were in the house on the Links 80 or 90 years ago."

This is just one of those speculations which it is impossible to either prove or disprove.

Monmouth, Brecon, and Radnor.—The extensive additions to this asylum make satisfactory progress. Blocks for male and female epileptics have been completed, and are in use.

The Commissioners point out that the staff in several of the wards is insufficient. Seventy males and 40 females do not go beyond the airing-courts for exercise.

Dr. McCullough reports that after a year's experience the disuse of beer as a diet has certainly had no bad effect on the patients, whilst he has no hesitation in saying that the effect on the attendants and servants has been good. Amongst the lesser advantages, it has relieved the officers from the perpetual requests for beer on all sorts of pleas. The new dietary, which was settled after many trials and long and careful consideration, has given great satisfaction, and has proved to be ample.

Murray Royal Asylum, 1882.—The administration of this asylum continues to be marked by energy and ability. Numerous important changes have been introduced—among them the open-door system. Concerning it, Dr. Urquhart reports :—" By a combination of watchfulness and trustfulness I think the best results are to be obtained. Thus we had a case constantly requiring supervision, the watchfulness of the night-nurse being tested by a tell-tale clock. Yet we have found a most satisfactory outcome from the extended freedom granted to a large proportion of the inmates. Two galleries are now open as an ordinary house, and I hope to extend this system to the whole of the north block in the course of this year. It is surprising how little trouble this revolutionary policy gives, and most gratifying to hear the encomiums bestowed on it by the patients themselves. The liberty has not been abused since it was granted, some twelve

months ago. The single escape which occurred during the year was not in consequence of increased liberty. Of the 81 patients to-day in the asylum, nine gentlemen and eight ladies go about unattended beyond the grounds; while 12 and 16 respectively are on parole within the walls. Nine gentlemen and eight ladies have liberty to go to church in Perth with and without attendants; while one gentleman has a seat in one of the churches in town, and is a communicant there."

Several of the gentlemen are now actively and usefully employed in outdoor work. This is a method of treatment which might be adopted in many asylums where gentlemen are received. In this respect paupers are better off than their social betters.

1883.—It will be sufficient to notice that Dr. Urquhart again reports most favourably of the open-door system.

A house has been leased at the sea-side, and small parties are sent thither for change of air and surroundings.

(*To be continued.*)

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2. *American Retrospect.*

By Dr. Hack Tuke, F.R.C.P.

Report of the Pennsylvania Hospital for the Insane, 1883, *with Memorial of* Dr. Kirkbride.* Philadelphia. 1884.

Although our Obituary of last Quarter contained a short sketch of Dr. Kirkbride's life, we avail ourselves of the above Memorial, which has been subsequently issued, to present a more extended notice of one who was regarded by his fellow alienists, and most justly, with the greatest esteem.

Dr. Kirkbride held strongly the importance of the medical superintendent having the supreme command in an asylum. His relations to the managers were, however, of the most friendly character, and he valued the help they accorded him, and the responsibility they shared with him. Writing in 1859, he says:

"I cannot well refrain from repeating what has been said on another occasion, that with all these changes of men (on the Board) there has been no change of principle, no abatement of interest in the good cause, and that I have steadily received a degree of support and confidence for which I shall always feel the deepest gratitude, and without which much that has been accomplished would probably never have been undertaken. Such support and confidence may often make a pleasure of what would otherwise be heavy toil, and help to secure what no pecuniary consideration could purchase."

* The great freedom taken in condensing this Memorial must not be attributed to dissent from the passages omitted, but simply to lack of room.

It is observed in the "Memorial" that "To Dr. Kirkbride from the first were given the power and the privilege of awakening in the minds of the managers the spirit which prompted the Egyptian King to say to the young Hebrew, 'Forasmuch as God hath showed thee all this, there is none so discreet and wise as thou art; thou shalt be over my house, and according to thy word shall all my people be ruled.' But lest it should be thought, especially by the young, that such capacity and such favour are easily attained, it must be added that Dr. Kirkbride's attitude to the successive Boards was always that of one entrusted by others with a great service, and responsible to them for the strictest stewardship. Untiring diligence, unceasing labour, and the greatest conscientiousness were the cheerful price he paid. 'No man ever had more pleasure in his work than I; it was always a pleasure when I was well,' was the remark he made during his last illness in looking back upon his life. Rest was grudged, and sparingly, if ever, taken; labour was lavished, and this not with a vigorous, physical frame, but with a constitution far from strong. When of late years his family urged the propriety and necessity of longer vacations, the answer invariably was, 'I am responsible to others; the Managers expect me to be at my post.' In an admirable sketch of his character published in a medical journal, his overpowering sense of duty is spoken of as his greatest excellence. In 1853, after passing through a period of ill-health, but not of cessation from active duty, he felt that his term 'of service in the cause had been nearly as much protracted as can be required of one individual,' but he worked on with the same energy thirty years longer. Some men labour with diligence and spirit, but speak as if in working they were always in the shadow, and looking ever with longing to sunny fields of rest before life is ended. Those who knew Dr. Kirkbride most intimately never heard him speak of craving rest; to him the sunshine lay always in and about the Hospital."

A sketch of the regular duties of each day, in the Hospital, is a subdivision following "Organization" in the Report for 1841; these have been carried on with few changes ever since. The two pages containing the list are easily read, but it may be safely said they cover an amount of self-denying labour, and of voluntary isolation on the part of the physician, from much of the gratification which many hard-workers in other positions feel they must allow themselves, of which those ignorant of hospitals have scarcely an idea. This is true of all faithful service in a hospital for the insane.

The importance of *employment* was early recognized by Dr. Kirkbride, as will be seen from the following citations from early Reports:—1841: "The importance of furnishing the insane with suitable means of employment and amusement, is now so well understood, that we shall merely indicate those to which our patients have resorted during the past year.

"At the head of the list we place outdoor labour, on account of

its importance in many of the curable cases, and its value in even those that are the most chronic and incurable."

"The Workshop, of which we have had the use only during the last two months of the year, is a valuable acquisition to our means of employment.

"Many of our cases, generally among the convalescent, have already been pleasantly and profitably employed in this building, and the interest they have felt in their work, the entire change in their thoughts, and the active use of their muscles, have rarely failed to contribute to the rapidity and certainty of their cure. We have not as yet attempted any kind of work by which to ascertain the amount of income that might be derived from the workshop; it would unquestionably be small, but, like other kinds of labour performed by the insane, its value cannot be reckoned in dollars and cents, but as a means of restoration or comfort to the inmates of the Hospital. Our great object thus far has been to induce our patients to labour; for the kind of work we have cared but little, and whatever object appeared most likely to excite a new train of thought has received our approbation."

"The female patients employ themselves when indoors, in a variety of fancy work—in sewing, knitting, making or arranging clothes, reading, games, etc."

"In fine weather, at all seasons, a large proportion of the patients take daily exercise in the open-air, by long walks, either singly or in companies—commonly within, but frequently outside of the enclosure.

"A carriage and horses are kept expressly for the use of patients, and are particularly enjoyed by the females."

In 1842 he writes: "Outdoor employments and amusements are generally to be preferred; but a full variety should also be collected within the building, for those who from any cause go out but little, for stormy weather, and for the long evenings of winter, which are often passed pleasantly and profitably.

"Writing, drawing, painting, the study of the mathematics, and other branches of learning, have tended to beguile many tedious hours. Several gentlemen have been usefully engaged in imparting instruction to others in the same ward, and two have been improved by giving regular lessons, for a short time, in one of the modern languages.

"A great variety of games also tends to fill up the time spent in the parlours and halls, and several musical instruments offer recreation to those who are thus inclined."

In 1843: "The value of mechanical as well as other kinds of employment in the treatment of insanity is now so universally conceded that no arguments are required in its favour. Two cases, after a failure of all the ordinary means, appeared to be perfectly restored by this kind of employment, under peculiarly discouraging circumstances."

"The labour-problem in regard to the insane is probably best settled by the conclusion that it is hardly possible to exaggerate the importance of occupation of some kind for every class, but also that harm, quite as easily as good, may follow employment in unwise forms, and that a practical knowledge of the whole subject in regard to kind, amount, and the physical and mental conditions of those on whom its effects are to be tried, is indispensable to secure the best results from its use."

We especially direct attention to the above discriminating remarks.

Evening Amusements.—The need of amusements for the evening is early referred to. In 1844 a very fine magic lantern was in use. In 1845 lectures were established. "The regular course is being delivered by my assistant, Dr. John Curwen, who, in addition to the faithful performance of his ordinary duties, has spent much time and labour in his efforts to make this experiment useful and successful."

Dr. Kirkbride was never satisfied with his provision for the evenings, until every evening during the nine months' course of each year was filled. In 1863, at the Department for Females, light gymnastics were introduced, six out of seven evenings being from that time appropriated to some special form of amusement or occupation. The officers' weekly tea-party, introduced in 1866, and since then continued throughout the year, filled up the only unoccupied evening of the amusement season. This he considered as in some respects the most useful of all the entertainments. Forty persons, three-fourths of whom are patients able to take part, are invited successively from all the wards to meet at table in the officers' dining-room on these occasions. Dr. Kirkbride himself always presided at this meal unless prevented by some very unusual cause, seated where he could see almost every one present. It was often evident that, while apparently engrossed in making those about him happy, his thoughts were also busied with the interests of many, reached only by his eye and not his voice.

It is a frequent remark in the Reports that only by enthusiasm on the part of the officers can the amusements so necessary in a hospital for the insane be properly carried on; this enthusiasm he never failed to show in the highest degree. He made it a rule through his long course as superintendent to attend all the evening entertainments, thus insuring in wonderful measure the interest of both patients and attendants, and the presence of the former. The mere fact of the remarkable ardour with which he threw himself into this part of his duty inspired the same in many an inert mind. An eminent English physician, who had himself been a hospital-superintendent, making him a visit of ten days, asked with surprise and incredulity, as evening after evening his host excused himself for a considerable time, "Is it possible Dr. Kirkbride goes every evening to the amusements?" Absence from the Hospital in the evening, indeed, until late years, was unheard of; and even then only indulged in after an unusually laborious day, and was so sure a sign of fatigue, that his family scarcely

knew whether to be more glad or more sorry to see him enjoy, what no man ever appreciated more, an unbroken evening in his own much-loved home.

The spirit always shown in regard to all the evening amusements is summed up thus :—

" No lowering of their character or diminution of their number can ever be permitted while a proper appreciation of the high mission of a hospital for the insane is felt by those entrusted with its management."

Sunday.—In his Report of 1841, Dr. Kirkbride wrote that it was a source of gratification to find that Sunday in the Institution was almost invariably the day of greatest comfort and quiet among the patients.

" The objects of religious observance in hospitals for the insane are various, not alone because their propriety is unquestionable, but also because many patients derive real comfort from participating in them. Some have satisfaction from thus mingling with the officers and other patients, and occasionally an important moral effect in self-restraint is produced, which may be the first step to future convalescence. This effort at self-restraint has often appeared to me to be strongly brought into exercise by the simple manner in which our assemblies have been conducted."

In referring again to the subject in 1857, he remarks: " No visitors are admitted on this day, and all unnecessary labour is avoided. It has long been a subject of remark that the quiet and repose about the whole establishment which are then almost always to be observed are very striking. This seems to be attributable to a deep-seated respect for the day, the effect often, no doubt, of early education, and which is not entirely lost even when disease has taken from the mind some of its highest attributes. On Sunday no leave of absence is granted but to attend Divine worship, and throughout the grounds, in the shady groves and pleasant summer-houses, as well as in the wards, our inmates seem to appreciate the quiet and repose that rightfully belong to the day."

Dr. Kirkbride was not always successful in preventing encroachments upon his time by persons willing to curtail, on the day of rest, even his partial relief from engrossing duties, yet the peculiar restfulness and peace of Sunday in his own house have been remarked by those who were his guests. Dr. Kirkbride had only too much opportunity to see and realize how many good men, through a neglect of natural laws, and through overwork, lower their capacity for benefiting their fellow-creatures. Every day of life was passed by him in blessing others. On Sunday opportunity was granted to attune the heart to the highest, sweetest tones, only that the harmony might sound through each moment of the week, to be renewed again by the next day of worship and of spiritual rest.

On that day he made it a rule never to leave the place in the

afternoon, that being the time given to his assistants; and part of it, through all these years, was almost invariably spent in walking about the grounds with his family. The memory of these walks to all his children is one of their most precious associations with the day of days. For a number of years after the removal of Dr. Isaac Ray, the eminent author of the "Medical Jurisprudence of Insanity," from Providence to Philadelphia, he received a visit every other Sunday afternoon from this most valued friend, and together they took both grave and sweet counsel upon many subjects, but above all upon that which engrossed the mind and heart of each.

Until his illness in 1879 Dr. Kirkbride conducted the simple Hospital service, reading aloud several chapters from the Bible. Singing of hymns by patients and attendants followed the moments of silent worship at the close of the Bible reading. His voice was not loud, but remarkably distinct; his clear and soothing tones were heard perfectly by those seated farthest from him. The "Doctor's reading" was a tonic to many an aching heart.

"*Avoidance of Deception in Treating the Insane.*—Deception is so often resorted to by those who have charge of insane friends, and injury unintentionally done by it, that some remarks on the subject in this place cannot be considered inappropriate. Those who have had much intercourse with this class will generally agree that candour is proper under all circumstances, and particularly where it is most apt to be neglected, in bringing patients to a public hospital." (1842.)

About a year ago there was much discussion in the religious newspapers as to whether deviation from the truth under any circumstances can be considered right. One of Dr. Kirkbride's family was asked by a clergyman his views and his habit on this point in dealing with his patients. The question was repeated to him, and he earnestly exclaimed: "I hope you gave a most decided answer, and made it thoroughly understood I never think it right to speak anything but the truth." Only those who know much of the frequent developments of insanity can understand the mental strain which unfailingly firm, tender, and sympathising candour with the insane through a period of more than forty-two years involved. He had also that rare combination of perfect sincerity and delicate tact which, valuable in any position, is invaluable among the insane. In his last report he speaks of these traits as important for workers in his field of labour. "No amount of compensation, however, no period of relaxation from duty, will secure the highest form of usefulness, without a real enthusiasm in regard to the work in hand—a generous sympathy with all who suffer, and the possession of a manner which takes away all doubt of its being genuine. Such persons must be possessors of that quality only to be described as tact, and so valuable in all positions of life; and they must show, too, in all their actions that they fully understand that the provision of all these structures and their many and costly arrangements are for the

special comfort and benefit of the patients, and not, beyond what is necessary to show a hearty recognition of faithful services, for those who are employed to have charge of them. If it were possible to teach this matter of tact to persons about to enter upon the care of the insane, it would be an invaluable preliminary study. It is so common to be absent, however, where so many other valuable traits are found, that, insensibly, we learn to regard it as essential in one serving as a care-taker upon those labouring under mental unsoundness, and that it must come naturally if it comes at all. It cannot be too often repeated that to be specially valuable about a hospital for the insane, no matter what the position of an individual may be, the interest in the institution, its patients, and the conscientious performance of duty, must ever be far beyond any thought of personal aggrandizement."

Restraint.—In regard to restraint, the views of the five earliest Reports are strikingly in accord with Dr. Kirkbride's later opinions. An extract is given from each to show fully the position taken by him forty years ago: "Our invariable rule is to remove all restraint from the person of every patient upon his entering the Hospital, and it is with extreme reluctance that it is ever re-applied.

"Although the means heretofore detailed, and the aid of a vigilant and efficient corps of assistants, have enabled a large number of the patients to enjoy the privileges which I have mentioned almost from their first entrance, it is not to be concealed that we always have in our family some with that unfortunate temperament that blackens the fairest scenes, distorts the purest motives, and misconstrues the kindest actions; and that many require some more decided restraint until the violence of their attack has subsided.

"No hospital for the insane can ever be without restraint; the very character of the building, the laws for its government, and the supervision and discipline that is required, impose a wholesome restraint upon all who enter its walls. Fortunately the discipline and restraint which the necessity of the case demands can hardly prove injurious. The same cannot be said of the means formerly believed necessary, the evils of which were of so terrible and lasting a character that too much pains cannot be taken to diffuse more correct and enlightened views on every occasion.

"Seclusion to guarded chambers for a limited period is of vast importance in the treatment of insanity; but, to prevent abuse, its duration must be under the immediate direction of a superior officer of the house. To no other persons can it be safely entrusted.

"Every year brings us cases to prove the danger of seclusion being improperly continued. Seclusion for very short periods I have found sufficient restraint for nearly every case under care during the past year, and with an average population of one hundred and fourteen there have rarely been more than four or five confined to their chambers. On more than one occasion, for two or three weeks together,

not a single male was thus restrained. At the time of writing this Report, and during several previous weeks, there has been but one of each sex in this situation. If proper provision is made for seclusion, classification, and attendance, all the common kinds of restraining apparatus may be dispensed with in the treatment of insanity, but of the propriety of doing so under all circumstances I still entertain doubts.

"Had I felt anxious to make such a declaration, it would have been in my power to have stated that during the past year no restraining apparatus of any kind had been upon the person of a single patient of this Hospital; but believing as I do that its occasional employment may be conferring a favour on the patient, it has always been resorted to where there existed a proper indication for its use. The only indication for its use that is recognised in this Hospital is the positive benefit or safety of the patient—never the trouble of those to whose care he is entrusted—and the direct order of the physician or his assistant, the only authority under which it can be applied."

In the second edition of his work on Hospitals, published in 1880, and already referred to, he writes: "Physicians may differ widely in regard to the particular forms of mechanical restraint that may be most desirable, but it is safe to say that they are few in number, simple in form, and little repulsive in appearance. In my own experience, strong wrist-bands, soft leather mittens, connected linen sleeves, and the apparatus for confining a patient in bed, are all that are required; the last-named, in certain conditions of a patient, being of the utmost value, and often unquestionably a means of saving life. My experience would indicate that on an average not more than one or two per cent. of all the patients require any mechanical means of restraint, that often a period of several months may pass without their being needed, and that any Superintendent may conduct an institution without applying them, in case he is anxious to avoid the criticism of pseudo-experts, and willing to let his patients lose the advantages that may result from their occasional use.

Attendants.—The views of Dr. Kirkbride in his earliest years as Superintendent, in regard to the qualifications desirable in attendants, have no uncertain sound. A part only of his remarks on this subject in the first five Reports are quoted, but with some repetition, to show how from year to year he emphasized the subject:—

"To these situations we endeavour to appoint none but those who are strictly temperate, moral, and of good intelligence. To perform *perfectly* the duties of attendant requires such a variety of qualifications—such peculiar mental and physical endowments as are not often combined in the same individual, that, in all our engagements, it is understood that no one is expected to remain in the station who is found deficient in the qualities we deem essential to its proper performance.

"Few persons are to be found who possess all the qualifications, mental and physical, and the peculiar temperament necessary to make a perfect attendant. Without a trial, it is impossible even to say who will perform the duties of the station sufficiently well to make it to their own interest, or that of the institution, that they should remain in it.

"A high moral character, a good education, strict temperance, kind and respectful manners, a cheerful and forbearing temper, with calmness under every irritation, industry, zeal, and watchfulness in the discharge of duty, and, above all, that sympathy with those under care which springs from the heart, are among the qualities which are desirable, and as many as possible of which we endeavour to combine in those who are placed in this station.

"When all these are found in one individual, and he has been instructed in the proper mode of performing his duties, his services to any institution and to the sick are truly invaluable. Such an attendant is really a benefactor to his species."

"A more numerous body of attendants, with higher qualifications, is also necessary. They should be individuals who enter with zeal and cheerfulness upon the performance of every duty; who manifest a true feeling of interest in the welfare and comfort of every patient, and in carrying out every measure that may be proposed by the proper authority. They must be able, under all provocations, to control their temper; never to forget that they are dealing with fellow-beings who are insane, and never tire in their endeavours to acquire that tact which will enable them, by an invariably mild and kind, but firm and dignified deportment, to control those who come under their care. It need hardly be said that the services of those who do this cannot be too highly appreciated, and that they are deserving of the warmest commendation. Those who do not possess, or cannot acquire, these qualifications, or who perform their duties solely to keep their places, can never be desirable in a well-conducted hospital for the insane."

"A proper system of attendance upon the insane is so intimately connected with the abolition of restraint that it seems natural to speak of the two subjects in connection. In many instances the comfort and happiness of patients depend very materially upon those who fill this highly responsible, arduous, and useful station. When these duties are faithfully performed—where the prominent motive for action is the true Christian feeling which warms the heart towards the afflicted, and makes us treat them in all things as we would wish ourselves treated—every one who has ever required such services will join me in declaring that their value can hardly be estimated.

"There are many means by which a judgment may be formed of the real qualifications of attendants, the most important of which are the constant and varied supervision which enters into our system of

organization, and the valuable communications often made by patients themselves.

In the same year the Supervisors are mentioned: "One for each sex, whose duty it is to pass their time among the patients in the different wards and pleasure-grounds, to endeavour to interest, employ, and amuse them in every way in their power, and to see that all rules for the attendants in their intercourse with the patients are rigorously observed. Before retiring at night, the supervisors furnish the physician with a written report of whatever has come under their observation during the day."

In 1844 Dr. Kirkbride suggests the employment of "a limited number of attendants of a higher order, who shall be released from all the ordinary ward duties. They should be men with true Christian feelings, courteous manners, intelligent and cultivated, and possessed of a peculiar tact, in order to do justice to such a station."

In 1846 he mentions: "In the female division of the house we have this year commenced the employment of a lady, who, released from the care and supervision of the wards, will be able to devote the whole of her time as a companion to the patients . . . when required, devoting hours of a day, or even whole days, to a single patient."

In 1848, in referring again to teachers and companions, Dr. Kirkbride writes: "If properly qualified, no persons can add more essentially to the comfort and happiness of the insane—can aid more materially in carrying out, in the proper spirit, many of the directions of the chief medical officer—prevent so effectually the occurrence of difficulties among the patients, or between them and their attendants, and secure so thoroughly to all interested the conviction that nothing wrong can be committed by any one, and no duty be neglected, without certain and speedy detection.

"We continue to find a single individual of this class, of each sex, of great value in our scheme of treatment, and the extension of the number, so as to bring their influence still more effectually on individual patients, I regard as one of the most important improvements to be made in the organization of hospitals for the insane. In carrying out any enlarged or liberal system of mental treatment their aid is indispensable."

In 1861: "Many patients, especially when first entering a hospital, should have particular care from such persons as have been referred to, perhaps for days together. These companions, released entirely from ordinary ward duties, by their tact and persevering attentions may do much to give to patients pleasant impressions of their new home, and pave the way for a ready acquiescence in what may be necessary in the progress of the case."

Manual for Attendants.—During 1841, in addition to all the labours of that year of organization, he prepared a book of printed

rules for the attendants, of which there have been subsequently two editions. This little manual, which has had value and influence beyond the immediate field for which it was designed, is of itself lasting proof of the views and the standard of this institution from its beginning in regard to attendants. In the first Report we read : "Printed rules are furnished to the attendants when entering upon the performance of their duties, and to which they are expected to conform in every particular. In these rules, and on frequent occasions, we endeavour to impress the attendants with a true view of the importance and responsibility of their stations—to give them some idea of the principles which should govern them in their intercourse with the patients, and the reasons for our different regulations. We insist on a mild and conciliatory manner under all circumstances, and roughness or violence we never tolerate. We are not satisfied with the simple performance of special duties, but wish to see an active interest felt in all the patients—a desire to add to their comfort, and to advance their cure—judicious efforts to interest or amuse them—a watchful care over their conduct and conversation, and a constant, sympathising intercourse, calculated to win their attachment and command their respect and confidence."

It is interesting to reflect that these are the views of attendance and supervision laid down in this institution forty-three years ago. The "unvarying kindness and sympathy" which were "insisted on," and the patience of which Dr. Kirkbride was himself the example through this long period, have ever been the rule ; absolute perfection, indeed, has not been found, but it has never yet been found in those who tend the insane out of hospitals, nor, indeed, among the dearest friends and relations of the insane themselves. There has ever been much unselfish labour each year, however, that enabled Dr. Kirkbride to feel as he did when he wrote at a later time : "I have also the satisfaction to be able to report the valuable services rendered in their respective departments by the supervisors, teachers, attendants, and others connected with the immediate care of the patients. Upon the care, vigilance, kindness, and sympathy of all these much of the comfort of the insane must ever depend. To give all these in their full efficiency requires an intelligent mind, a genuine good heart, a temper under full control, and truly Christian principles. Wilfully to withhold them ought to be considered ample proof of a weak mind and vicious principles, with a complete forgetfulness of that Christian motto which should be printed in letters of gold in every institution for the insane, 'All things whatsoever ye would that men should do to you, do ye even so to them.'"

This was, indeed, his own rule of conduct, and those employed about the patients, as they watched his submission of self in all points to this law of heavenly love, his tenderness, and gentleness, and patience, saw also the beneficent effects of his actions upon the

sufferers under their charge, and consciously and unconsciously, both in and out of his presence, many of them to a remarkable degree, followed his methods and imitated his example.

Finances.—This memorial would be incomplete were not Dr. Kirkbride's connection with the financial history of the institution alluded to. In this important part of its administration, and in the wise use of its moneys, the crucial tests of many men in other respects of great ability and noblest impulses, he was not found wanting. The same perseverance and hopefulness, the same calm foresight and prudence, which he exercised as a physician, he showed also here. His principles are stated in 1845: "In the expenditures of this hospital it has always been a rule that everything should be done with the strictest regard to economy—to that true economy which, in institutions of this kind, consists in never spending a dollar without a reasonable expectation of its being useful, and in avoiding waste of every kind; but at the same time making a liberal use of every means that is likely to promote the recovery of the patients, or, when that is not possible, to give them the highest degree of health, happiness, and enjoyment of which their situation is susceptible." Much of the past financial prosperity of the hospital is due to the large administrative ability of Dr. Kirkbride.

When the wards of the hospital were full, and the idea of the erection of a new building suggested itself to him, the enthusiasm in the project which he felt himself he succeeded in imparting to others. Many, including the whole Board of Managers, threw themselves most heartily into the work of raising by voluntary subscriptions the 355,000 dollars needed to build and furnish the Department for Males. All will allow that, as Dr. Kirkbride originated the plan of the separation of the sexes, so it was also his energy and devotion which eminently contributed to the raising of this large sum, and to the accomplishment of what he considered the great work of his life—the provision of a second hospital for this institution, with every modern improvement, and the advantages of a separate building and complete classification for each sex.

Free Patients.—In 1842 Dr. Kirkbride writes: "I cannot conclude this report without calling the attention of the Board to the great good effected by the free list and the amount of suffering annually relieved by it;" and in 1845, in reviewing the work of five years, under the head of *Benevolent Character of this Hospital*, he writes at greater length: "It is not only a matter of interest to those who are now contributors to the Pennsylvania Hospital and to the community, but it is due to the memory of the men of a past generation, who freely gave their time and money in fostering it and promoting its prosperity, that the doings of this branch of the corporation towards carrying out its charitable character should be occasionally adverted to."

The Hospital has continued through all these years on its long

course of blessing. "Purely unsectarian, it receives into its wards, as long as there is room, the mentally afflicted of every class, profession, or creed, without regard to residence, and, as far as it is able, dispenses its benefits to those from our own State not blessed with this world's goods as freely as to those who seem to have nothing to ask for but health."

"No one connected with the institution has any pecuniary interest in its income or in the receipts from the board of its patients."

Those who would estimate the value of hospitals for the insane, must remember that to Dr. Kirkbride the insane meant not only the rich or persons in comfortable circumstances, but also the indigent, who, with small homes and narrow means, can often make no adequate provision for ordinary illness. The poor he had, indeed, always with him. None loved him better, or appreciated him more thoroughly, or found in him a better friend, than his poorest and least intellectual patients; his time, and skill, and sympathy were given to them without reserve. His whole personality, however, his courtesy of manner, the sensitiveness of his nature, his ready tact and sense of humour, all his powers of mind, never seemed so fully called into play, or so admirable in exercise, as in those cases where acute intelligence, refinement and cultivation combined often to make the most difficult and the most exacting of the many difficult and exacting cases with which he had to deal. In treating the former he was like the skilled musician playing with depth of feeling a melody in itself so sweet and varied that nothing more skilful or more beautiful can be fancied until with greater art he renders the elaborate composition through which runs the same lovely air.

Association of Hospital Superintendents.—In 1845 Dr. Kirkbride mentions the formation of the Association of Medical Superintendents of American Institutions for the Insane, which held its first session in Philadelphia in the autumn of 1844, adding: "The best interests of the insane can hardly fail to be promoted by the cordiality and good feeling which exist among its members, the zeal with which its objects are advocated, and the friendly rivalry which animates each one to be foremost in advancing the permanent welfare of all who are afflicted with mental disease." He was one of the founders of this Association, and its President from 1862 to 1870. Of the thirteen superintendents present at the first meeting, but two are now living, and only one still remains in charge of an institution."

Reports and Personal Recollections.—In his fourth Report Dr. Kirkbride speaks of the practice of publishing reports of the operations of hospitals for the insane having then become nearly universal, and adds: "The results of enlightened treatment, and the conclusions of those who make insanity a study, are as likely to promote the advancement of the cause as anything that can be written." The Reports of every hospital for the insane in this country, and of many abroad, were sent to him. He read them all, generally making it a

rule to do so immediately on their receipt, so that the remembrance is distinct of seeing him seat himself after the coming of the afternoon mail in a chair near one of the western windows, report in hand.

His own long series remain not only a history of this institution and a memorial of his work, but as a whole these Reports form a most practical treatise on insanity, deserving the attention of the general reader as well as of the medical student. They give also, indirectly, a picture of public opinion in regard to insanity and its treatment during the period of their publication. In the different phases of the subject taken up from year to year it is seen where Dr. Kirkbride, as an experimental teacher, felt his knowledge likely to be of most avail. They are, with the book on Hospitals for the Insane, his principal literary works.

He was naturally fond not only of the manual task of writing, which he performed most rapidly, but also of giving utterance to his thoughts on paper. He wrote good English, and had, as part of his mental endowment the power of clear and correct, and often beautiful, expression. But this was a native gift unlike that for building or for mechanics, for management of general affairs or for personal influence, which his high idea of duty bade him partly to restrain rather than to develop to the utmost. "I cannot feel it right to shut myself up to write," he would say, and sometimes, "I wish I could think that duty allowed me to deny myself to those who ask to see me, but I have never felt I could do so, even when I have writing on hand;" and therefore it became second nature to write, not as an author, but as the physician and superintendent ready to answer every call.

It must, then, be remembered that these Reports were penned, not in the seclusion of the student's closet, nor as the fruit of that retirement which often produces fair but untried theories, false to philanthropy, because untrue to experience, but by one fresh from the hourly duties which pressed upon him, testifying of what he saw and speaking of what he knew. His exhortations to kindness and consideration, and practical wisdom, in the care and treatment of the insane, both acute and chronic, his descriptions of the high character needed in persons occupying any position in an institution specially provided for these sufferers, were written in moments snatched from his unceasing labours, and perhaps just after having his patience and his tenderness sorely tried in soothing the irritable, or comforting the sad, or calming the excited, or possibly—and this was still more trying—after being made grievously aware that much of the best aid he could secure in his great task was, at times, sadly below his ideal. Indeed it was a frequent remark that he never had any trouble in managing the insane, but that his only difficulties lay in the management of the sane. After his return to his own home from his duties at the hospital, the interruptions to his literary work and to his correspondence, which often involved much serious thought, and of which from first to last he took unaided

charge, answering with his own hand every letter of every kind requiring a reply, were almost endless.

Friends of patients came for inquiry, or to seek merely the comfort his words afforded ; applicants for the position of attendant sought him ; brother-physicians called to talk over some obscure case ; husbands or wives, brothers or sisters, parents or children, brought their afflicted dear ones to ask his counsel in their need—such visits often requiring a long and separate interview with each party ; mechanics came to seek their orders about the building or the improvements continually on hand ; patients, nurses, employés, or officers from the hospital asked his quick decision upon some knotty point, the decision not always shutting off subsequent discussion.

It is a curious fact in this life of much correspondence and other work with the pen, that neither at the hospital nor in his own home had he a spot exclusively his own, where either in study or consultation could he be sure of not being, at least, looked in upon by those with whom he shared his right to each apartment.

His library at his own house was also the dining-room and the favourite room of the home. There stood his desk and chair ; there he wrote, and planned, and thought ; there his older children centred all the sweetness and most sacred memories of their early lives ; there in later years his younger children and his grand-children, never dreaming of causing annoyance, for annoyance was never shown or expressed, came to play unchecked, and to seek the unfailing sunshine of his presence. " You never disturb me, you never disturb me," was the answer to any apology for seemingly ill-timed interruption on the part of the older members of the family. His sympathy was so ready in every enjoyment, in every vexation, his judgment so ripe in every household decision, that even the burden of the little things of family life—from which some men of large responsibility shrink rightfully as an irritating addition to their weightier cares—was brought to him. How could one help carrying even trifling troubles to such patient ears ; how could one resist craving the sympathy of those tender eyes ; how could one wait for his rarely unoccupied moments to ask his wise and soothing counsel ?

Yet notwithstanding his wonderful gift in the management of the housekeeping of the wards, so that report said : " Dr. Kirkbride never fails to see when a counterpane is laid crooked on a bed," and his eye was most quick to detect the least want of cleanliness at the hospital, in his own home, criticism, unfavourable criticism, was unknown. At table, complaints of food which chanced to be improperly prepared were more distasteful to him than the unsavoury dish. " Why speak of anything which does not suit you ; it requires little discernment to perceive that an article is poorly cooked ? "—and so his taste was learned, not through fault-finding, but by the food left untouched upon his plate. His hours for meals were never materially changed. " People know when they can find me at home," was the

imperative reason for keeping the early dinner hour chosen in 1841. For twenty-five years he breakfasted in summer and winter at half-past six, and coming down at that time his family almost always found him at his desk. As may be inferred from his early rising, he was in the habit of retiring early also. He writes: "Abundant experience justifies the opinion that regular and early hours for sleep will do more than all other causes combined to enable any one with no special constitutional advantages to undergo for long periods much physical and especially great mental labour, with all the depressing influences that every life is exposed to, without serious injury." Knowing the labour he was called to undergo each day, he made it a matter of principle almost invariably to stop all mental work, no matter how engrossing, at or a little after ten o'clock. His usual hour of return from the hospital was nine o'clock, frequently half-past, so that he took but a small part of the evening for his own.

When others complained of weariness, he has been heard to say: "I am always tired at night—I have scarcely ever known what it was not to be so;" but of the irritability of which many are conscious as the result of great fatigue, he acknowledged himself utterly ignorant. His strong will and his command of his powers of mind were shown in the manner of seeking repose. "I have long made it a habit," he said, in counselling those who complained of inability to sleep, "to stop thinking the moment my head touches the pillow; had I not done so, I should never have been able to perform the work, or to endure the trials or the fatigue I have undergone."

Some of these are homely details, but when the strong light of home, falling on a life of public service, discloses only beauty, it is right to draw the curtain and reveal its rare perfection. And so it was that the old house in which he lived, bright and cheerful as it is with its many windows, whoever might be within it seemed to grow dull and empty when he left it, and to be brighter and more full of joy when he returned; thus his home-coming several times a day from the hospital was ever, to young and old, a fresh and conscious happiness.

But the peculiar feeling of restfulness and help in the mere knowledge of his being near was probably never so fully realized by any as by his female patients. The mere report in the morning that Dr. Kirkbride was absent for the day caused a strange sense of loss; his short yearly vacations, only twice during his long service prolonged to four weeks, and generally lasting but three or less than three, were weeks when personal troubles were hardest to bear, and delusions of the mind most consciously painful; while his return, even to those with whom insanity meant blackest despair, brought an emotion more nearly akin to glad relief than any other the sufferers knew. It may chance that some who read these words in the sunlight of reason and the happiness of home will recall the feelings just

described, and will remember how often they and their fellow-patients gave them expression. A lady, living in England, who spent but a day or two in his home some years ago, wrote lately : " I suppose no one ever came across Dr. Kirkbride, even for as short a time as I did, without feeling a presence of goodness and kind wisdom, it did one good to be near. One did not need to be sick in mind to acknowledge his healing, strengthening power." This is, indeed, true ; but to the insane this healing, strengthening power was priceless in its influence. One, not long since his patient, writes : "I have never known any one whose presence commanded such reverence and love."

Great as was the interest he took in directing the building and improvements of the place, and great as was his ability in these respects, it was within the wards that he found his chief delight, and there also that the strength and the graces of his nature showed themselves most clearly. In 1849 he wrote : " The buildings of the hospital being now completed, the undersigned looks forward with great satisfaction tothe increased amount of time which he hopes to be able to give to the interior of the establishment, and to perfecting the means of restoring mental and physical health, and smoothing somewhat the rough places on the road of life of those who must look to this spot as their earthly home." To know him thoroughly, one needed to see him in the wards surrounded by those to whom his life was devoted. Perhaps, also, none knew him so well, or so thoroughly appreciated his power over the insane, as those restored to reason under his care ; for they had felt and realized in themselves the effects which others had only seen. None prized so truly the value of his words, and even of his looks, as those who in the sore distress of mental suffering and despair, or amid the vagaries of a disordered intellect, had felt the soothing, calming influence of a spirit which, whatever its inward struggles might have been, gave to others the impression in all outward show of speech, and look, and tone, that it had reached a centre of repose.

How conscientiously from the first Dr. Kirkbride exercised his personal ministry, more potent, perhaps, in itself than the many remedial agencies gathered within this institution, such sentences as the following, taken from the earliest Reports, give a clear idea : " At the visit of the physician and his assistant, which commences at half-past 8 o'clock in the winter, and at 8 o'clock during the summer, every patient is seen and spoken to—unless there is some special reason for an exception." " No favourable opportunity is neglected for personal intercourse with the patients, and for free and friendly conversation on any subject in which they are interested ; not excepting, in many instances, their own cases and their own peculiarities or those of their neighbours."

This seems the place to speak of Dr. Kirkbride's outward appearance, which was in keeping with his inner nature. Of medium height, rather below than above it ; slight in form in earlier life, in later

years he was somewhat stouter. His hands and feet were small, his step wonderfully quick and elastic. His face not handsome, but with marked features; his nose characteristic and unusual, but excellent; his mouth in expression of will-power most decided, but also most pure and gentle; his eyes, perhaps the most distinctive feature of a face in which on examination every feature was noticeable, so deeply set beneath an overhanging brow, that many thought them dark or even black, were in reality blue, and by no means of the darkest shade. They were very bright and clear, and in them tenderness was constant; in moments of emotion they grew brighter with love or pity; in merriment they often sparkled. His brow was unusually broad and full, and in youth was partly covered by thick black hair, which for many years had been much thinner and tinged with grey. Some persons, seeing him without acquaintance, failed to perceive anything specially marked or striking in this man of middle stature, but to others his face immediately disclosed the traits of an unusual character, elevated above ordinary humanity, and those who knew him best and loved him most, found his face as beautiful as the perpetual revealer of the beauty of his soul.

Dr. Kirkbride had in him a large capacity for friendship, and for inspiring it in others. Calm as he was in outward manner, and usually most reserved in the utterance of his inward feelings, the still waters of his heart ran through a deep, broad channel. Those who knew him most intimately were sometimes almost startled by the proof of the intensity of his affections. It has been said of him with truth, "few had so many friends." Men of the most differing traits spoke of him as "a most lovable man." The nurse who tended him through the last months of illness said: "I never knew a man so lovely."

His power of winning friendship was great, and so also was his faith in his friends. He was never known willingly to speak evil of any man, but to refer to the wrong-doing of a friend was real and acute pain, almost a torture, never voluntarily endured.

"A proper system of management in a hospital for the insane embraces a liberal provision for securing the physical health and the happiness of the incurable as well as for treating those who are likely to be restored. It is a relief, in many cases not easily estimated, for friends and relatives to know that those who are doomed to lasting insanity may at least have a home where, as far as possible, all their wants will be provided for and their safety insured, and where, if the enjoyments of reason cannot be restored to them, life will often be made cheerful and many of its pleasures be freely enjoyed. The incurable cases have, in this institution, always received a large share of attention."

In 1848 he writes: "In no branch of treatment for the insane is there greater room for progress, nor one in which important results are more likely hereafter to be attained, than in that which is directly

mental in its character. It is not in the early period of the disease that it is so essential, but after the acute stage has passed, where the malady appears disposed to assume a chronic form, or even where individuals seem to have reached that point at which they are too apt to be styled hopeless, and where neglect and ill-treatment are sure soon to make them so. It is, indeed, to the mentally lowest class of patients in our hospitals that attention should be most steadily directed; it is among these that will yet be found the widest sphere for benevolent labour, and from which results will occasionally flow that will reward anyone who engages in the work in the true spirit of perseverance and without faltering, because the field is less promising than some others.

"It must be in a low state of civilization when, in any institution for the insane, the young and amiable, those who are highly talented or accomplished—who are able to impart as much pleasure as they receive in their intercourse with others—who give little trouble, and whose delusions injure no one but themselves, are not treated with kindness and attention, and do not receive the sympathy and affectionate care of those whom accident or official duties bring in contact with them. But it is for those whose minds seem gone, and those who offer nothing attractive in their characters, but whose diseases have made humanity appear almost repulsive—careless in their habits—violent or perverse in their behaviour, with an apparent incapacity to appreciate many kinds of attention, that truly Christian feelings and an imperative sense of duty seem required to actuate anyone to the kind of devotion to their welfare that is both desirable and important.

"The lower and more troublesome the class of patients, the more likely are they to be neglected, ill-treated, or injudiciously managed by those who are not actuated by the highest and purest motives of action. It is for the care of this class that good judgment, kind feelings, and cautious discrimination are especially desirable, and too often least found. No one can tell how much harm may be done at a certain stage of mental disease—and who shall say where this stage begins or ends—by a single harsh word, by a rude manner, or a rough tone of voice, nor how much aid to a recovery may be given by a steady and unvarying course of conduct of an exactly opposite character."

Closing Years.—In October, 1879, Dr. Kirkbride was attacked by an obscure and serious illness; after various changes of condition, some of which were to the last degree alarming, about the beginning of the year he was so exceedingly ill that, in common with most of his medical advisers, he himself despaired of recovery. To the surprise of all, he rallied and gradually regained his health. The energy of his character and his enthusiasm in work proved not in the least abated.

It had for many years been his desire to re-write and to publish a

second edition of his book on Hospitals for the Insane—long since out of print—feeling it a duty before his days of labour should be over to make a complete record of his views on construction and organization, but the ever-pressing and continual demands upon his time rendered it impossible for him to carry out this earnest wish. During a brief holiday just before his illness he had at last fairly started, but only started, upon the task. The period of convalescence was hailed as auspicious for its fulfilment. The hours of returning strength, which most persons feel are justly devoted to light reading, or to the other limited amusements permitted an invalid still confined to his room, were spent in the difficult duty, far more difficult than that of writing a new book, of remodelling and adding to his book, published originally in 1853. In the early morning his voice was heard playfully summoning to work : " Come, remember we have a book on hand ; no time is to be lost ; if there were pen and ink ready I am sure I could dictate a good sentence." Remonstrance was useless, and to guard against an interdict by his physician, a promise of entire secrecy was secured from his family, and it was well kept. His attending physician made his visits to his patient, the doctors from the hospital came bringing their daily reports, and friends called to congratulate the invalid on his improvement, quite unconscious that near him the manuscript on which he had just before been busily engaged had been hastily concealed.

Thus the spring months ran on, work once more the key-note of his days, and after spending four weeks from home, more than three of which were passed under the hospitable roof and the devoted care of his friends, Dr. Charles H. Nichols and his wife—at the Bloomingdale Asylum, New York City, of which Dr. Nichols is superintendent—he returned home to resume, as far as possible, the old routine of hospital duty. His devotion to and enthusiasm in his charge were unchanged ; between hospital-cares and the oversight of the printing of his book, his time and strength were fully used, and at the New Year, 1881, he had the pleasure of sending a copy of the secretly-completed volume to his physician, causing the most entire surprise. The old burdens had again came upon him, and except that he was willing to take more rest than ever before, and that fatigue came more easily, there was no greatly marked change in outward life, and certainly none in the activity of his earnest spirit. The many friends who loved him blindly hoped that having passed safely through so severe a test, and having shown the greatest tenacity of life and wonderful constitutional vigour in a frame by no means robust, he was to be spared to them, and to his duties among the afflicted, far longer than the ordinary term of human existence.

His last years were full of pleasant memories ; as a rule, never were his spirits brighter. The weekly gatherings during this time, when all his children and his grandchildren met around his table, will never be forgotten, nor the zest with which he returned, after the enforced

absence, to the evening entertainments of the hospital. As in his youth he had won in an unusual degree the confidence and love of his elders—as has been seen by the trust placed in him by older physicians and surgeons, and by the Boards of the Frankford Asylum and of the Pennsylvania Hospital—so in age, he was the friend and chosen companion of the young. His feelings remained unchanged; within him there was no growing old; age touched him lightly, and even then its power was all without.

It may be mentioned here—and it was too striking a fact in Dr. Kirkbride's life to be omitted—that notwithstanding the vast amount of labour he performed, he was still able, when he felt duty permitted it, to command, as it were, a certain amount of leisure. He had leisure for long, patient interviews with those who called upon him in consultation; leisure to soothe and sympathise; leisure at times to give his friends. "Without haste, but without rest," described the conduct of his life.

At the close of 1882 and the beginning of 1883 many matters of much importance and engrossing thought weighed upon him. His hours of duty at the hospital became evidently more exhausting, but he could not be deterred from his regular, and even more than regular, visits.

In February he wrote the last of the numerous papers contributed by him to medical journals—a review of "Chapters in the History of the Insane of the British Isles," which appeared in the April number of the "American Journal of the Medical Sciences."

His illness speedily developed into typhoid pneumonia; after a few days his condition became very alarming. The prostration was so entire that the services of a trained nurse were soon found necessary. This was somewhat of a shock at first, as his family, unaided, had been able to care for him through his previous illness, but with characteristic courtesy and self-forgetfulness, the assistant was received with the greeting, "I fear I shall not be able to give you much pleasure as a companion." When attacks of fever came on, and his mind for the time was dulled, his affections kept all their brightness; then, not several times during the day, but whenever the members of his family approached his bedside, words of the sweetest tenderness were spoken, so that when they left him for their rest at night, distracted as they were with anxious fears, the accents of love they had heard still made melody about them.

After this period Dr. Kirkbride was from time to time on the point of death, but rallied in a most unexpected manner, and even got out of doors again. His mind was clear throughout his illness, and his resignation was complete. "I have not a thought," he said, "but of entire thankfulness." On Saturday, the 15th December, 1883, although very weak, apparent gain was made. On Sunday morning, the 16th, his condition was less favourable; he became unconscious about three o'clock in the afternoon; about nine o'clock his pulse

grew rapidly weaker, until gently and peacefully, at a quarter before midnight, with only a momentary struggle, he expired.

During the days between Dr. Kirkbride's death and his funeral, great sorrow, but great peace also, was in his home. On Thursday, the 20th December, after the family had met at an early breakfast, the room before referred to—as at once dining-room and library—was prepared for the last time to receive him. His desk was closed, his chair was empty, the books collected through a long lifetime were around him, never more to be opened by his fingers. The grey light of the cloudy winter morning fell sharply on the brow which even in death was full of the expression of intellectual power. All his family gathered once more about him, who in that room had ever been the centre of each social festivity, the fountain of each family joy. For the first time they met with no response to filial love in those beloved features; though of them he had said, four years before, when he thought himself dying, "I love them as much as it is possible for a man to love his children."

"There were great underlying forces in him which I knew and admired," writes one who knew him well. "All that was beautiful in his character gathered around and sprung out of and adorned those strong features, as the vines and wild flowers spring out of and beautify the rock on which they grow. Gentleness and humility, and patience and love, were all charming parts of his native and Christian character. But his intense earnestness, his resolute will, his stubborn adherence to every principle that he adopted, the bravery of all his convictions, the loftiness of his conscientiousness were the qualities that lay like the rock beneath the beautiful surface that graced his character."

Conclusion.—Memoranda for a Report, found since his death, illustrate some of his views:—

"*Contributions to Science.*—The highest achievement of medical science is the restoration of the sick to health. Whatever helps to do this is a contribution of the highest form. In this list are embraced all remedies of every kind, not medicine proper alone, but everything that can have any claim to be styled a remedy—all moral means, all surroundings of every kind, all the experience of the past, as given in books, all the knowledge obtained by personal observation.

"It is only when science fails in its efforts that the revelations of pathological investigations—the field of the scalpel and the microscope—become possible.

"While all the work where science fails in her first great object is to be encouraged, in the hope that something may come in the future, it is to be feared that much more is anticipated in many quarters from this source than is likely to be ever realized, and that too close a devotion to these investigations may lead to a neglect of many means of caring for the insane, which we know from a long observation never fail to be useful when properly and persistently employed.

"*The Work of the Future.*—The work of the future will be found to consist much more in perfecting in practice what is already theoretically understood than in the introduction of great novelties. The general principles that should be recognised in providing hospitals, in managing them when provided, and the essential features of the proper treatment of the patients, ought at this day to be tolerably familiar to all careful inquirers in reference to the best interests of the insane. Novelties are not to be rejected because they are novelties any more than the results of enlightened experience should be ignored because they are not appreciated by those whose estimate of their value is lessened simply because of their having been long used. While extended observations and protracted experience may naturally be expected to demand an intelligent trial of all proposals for radical changes before their final adoption, they will not refuse this test to any proposition for which reasonable grounds for trial can be given.

"While many theoretical views are likely to continue to be advanced and contested, it is fortunate that there are so many practical points on which there need be no difference of opinion, and that the most enthusiastic can always find enough to do, about the propriety or expediency of which there can hardly be a question.

"While referring to this work for the future, it may not be amiss to suggest a few matters that may safely be kept before the attention of governing bodies, and which are applicable to most—perhaps, it is safe to say, to a greater or less extent, to all our institutions.

"First among these may be mentioned—Rendering all buildings occupied by the insane as nearly fire-proof as possible.

"Improvements in the general attractiveness and home-like comfort of the wards.

"An increase in the libraries and of general reading matter, directly accessible to the patients.

"Greater facilities for carriage-riding, inside and outside of the grounds, so that all patients unable to walk sufficiently may have every advantage to be derived from this source. Among both sexes, but particularly among the women, the benefit derived from this form of passive exercise in the open air is very great, and the want of extensive enough facilities for its enjoyment is everywhere lamented.

"New modes of occupation and amusement, and of carefully regulated labour.

"Greater facilities for letting all the patients of every class have the benefits that result from musical performances. The music that can be given as often as desired by a few cultivated *employés* is an institution to be regarded as a remedy of no small value.

"A higher order and a greater number of companions to the patients, and of attendants actuated by a genuine interest in the work, so that cultivated patients—all patients, indeed—can constantly have near them a reasonable amount of congenial society, capable of fairly realizing the condition of those under their charge, and of contributing to their comfort and happiness.

"The more thorough instruction and examination of attendants, and the rejection of those who, after a reasonable trial, prove to be incompetent or unqualified for the work they have undertaken.

"The manifestation on the part of those in authority everywhere of a proper appreciation of the value of the services of those who exhibit a special proficiency and fidelity in the performance of their duties, whatever they may be, and, as now and then happens, evince a self-sacrificing spirit which no money can purchase.

"Inducements should be offered, by adequate compensation and permanence of position, to secure the best talent in the medical profession for the superintendence of these institutions, without which it can hardly be expected that those likely to best fill these posts will give up the more tempting and profitable as well as less onerous results of other branches of professional labour.

"The employment of an adequate force of attendants, thus reducing the use of mechanical means of restraint to a minimum.

"A sufficient number of medical officials to permit the most thorough and careful study of every case, for keeping all records of treatment, and increased facilities for pathological investigations.

"The clinical study of insanity when permissible, so conducted as to be of no injury to the patients, and to give to the general practitioner a greatly extended familiarity with the disease.

"It is scarcely necessary to say that all great improvements in institutions for the insane beyond their present capabilities necessarily involve a considerable increase in the amount of their expenditures. But if by the liberal use of these means the great objects for which hospitals were established are promoted, it may fairly be claimed that this is only to be regarded as a part of a wise system of economy."

As all Dr. Kirkbride's outward energies, for a period far exceeding the usual term of active work, were given to the insane, so were his thoughts also. As years went on, it seemed to those who knew him most intimately, that while his soul expanded, and his sympathies with all good aims deepened, his thoughts became more engrossed, if it were possible, with the great object of his life.

It has been said of Dr. Kirkbride that—"Labouring with a single aim for the relief and welfare of those to whose care he had devoted more than forty years of his life, he has left behind him, in what he has written and in what he has done, a monument which will stand so long as the care of the insane will require the aid of those institutions with which his name and his fame have been so imperishably connected."

The Board passed the following resolutions after his death :—

Resolved—That by the death of Dr. Kirkbride this institution has lost a most faithful and efficient officer, whose untiring and well-directed labours for some forty years have not only met with the cordial approval and co-operation of this Board, but have wrought a

high and enduring reputation for him, and for our hospital for the insane, over which he so long and ably presided.

Resolved—That Dr. Kirkbride's works for the relief of the insane, both in the administration of his office in our institution, and by his contributions to medical literature upon the subject of insanity and its proper treatment, entitle him to rank very high among the benefactors of his race.

Resolved—That by the death of Dr. Kirkbride we lose a friend bound to us by uncommon ties of affection and esteem. No one could come within the range of his influence without being made to feel that his rare endowments of head and heart were such as to attract the love and confidence of all his fellow-men, and throughout his life he well deserved that love and confidence.

PART IV.—NOTES AND NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The usual Quarterly Meeting of the Medico-Psychological Association was held at Bethlem Hospital on Tuesday, 6th May, 1884, Dr. Orange, President, in the chair. There were also present—Drs. J. Adam, A. J. Alliott, R. Baker, D. Bower, Bonville B. Fox, H. G. Hill, Henry Lewis, H. C. McBryan, Chas. Mercier, W. J. Mickle, H. C. Major, A. Newington, H. H. Newington, J. H. Paul, W. H. Platt, T. T. Pyle, H. Rayner, G. H. Savage, H. Sutherland, James Stewart, D. G. Thomson, C. M. Tuke, D. Hack Tuke, T. Outterson Wood, &c.

The following gentlemen were elected Members of the Association, viz.:—J. Walter Scott, M.R.C.S., &c., Assistant Medical Officer County Asylum, Fareham, Hants; Robert L. Stewart, M.B., C.M. Glasgow, Assistant Medical Officer County Asylum, Glamorgan.

The President said that he much regretted to have to inform the Members of the Association that they were not to have Dr. Manley as their President for the ensuing year, and they would be the more sorry to hear this when they learned that the cause of his withdrawal was ill-health.

The General Secretary then read a letter from Dr. Manley, regretting his inability, through ill-health, to fulfil the office of President, to which he had been elected at the last Annual Meeting.

Dr. Savage said he was sure that the news contained in Dr. Manley's letter would be received with concern, and the least they could do would be to unite in a vote of condolence, and to convey to Dr. Manley their regret that his health necessitated his not holding office during the ensuing year, and their hope that he might be able to fulfil the duties of President in some other year.

Dr. Adam seconded the motion, which was carried unanimously.

The President said that the rules of the Association provided that in the event of any vacancies occurring in any of the offices of the Association, the Council should have the power of filling them up until the next Annual Meeting. In consequence, therefore, of that unexpected vacancy, it had become the duty of the Council to fill it up. It was not always an easy matter for a Council to do what the rules of an Association empowered them to do. It was all very well for the rules to say that the Council may or shall do such and such a thing, and it was sometimes difficult to carry out what rules said might or should be done; but he was sure the meeting would be gratified to learn that the Council

had, on the present occasion, been able to discharge that duty, and they would be doubly glad to hear that Dr. Rayner, who had for some years past been performing the duties of General Secretary, had, at the request of the Council, consented, at this short notice, to undertake the duties of President for the ensuing year. He was sure all present would be delighted to hear this, and he saw that he might take it for granted that the thanks of the meeting might be conveyed to Dr. Rayner for so kindly filling up the gap.

Dr. RAYNER said that he had already thanked the Council for the honour they had done him in selecting him to fill the vacancy in the office of President, and he now begged cordially to thank the meeting for the kind way in which they had endorsed the action of the Council.

Dr. HAYES NEWINGTON read a paper on "Unverified Prognosis." (See Original Articles).

Dr. STEWART said that the paper just read was one of such wide interest, and opened up so many different points for consideration, that he scarcely knew where to begin. He could, however, warmly thank Dr. Newington for having placed before them so many suggestive thoughts, and he would mention one or two points which had occurred to him. It had been his own good fortune, early in his dealings with insanity, to have had the opportunity in his father's asylum of seeing the effects of religious excitement in the large district from which the patients were derived, at the time of what was then called a religious revival, and when allusion was made to an instance of religious rhapsody occurring in a case, incidentally, as it were, and not as the cause of the disease, it occurred to him that religious exhibitions led oftener to incorrect prognosis than perhaps anything else. He remembered that at the time he referred to, the friends of the patients were very anxious to know whether the insanity, which was in many cases very serious, was likely to be permanent. The difficulty in a great many cases was to recognise and discover, even with the assistance of the patients' friends, whether the religious rhapsody was due to the last impressions of the patient during the excitement of the revival, or whether the excitement of the revival had brought out the insanity which originally had nothing whatever to do with religion. There was, of course, in these cases a natural tendency on the part of the patients' friends to look upon the disease which they observed to follow so closely upon the religious excitement as being likely to result in permanent recovery; but, on the contrary, the disease in which, to the untutored mind, the prognosis would have been favourable, turned out to be anything but so. Those cases of insanity in which the disease was brought out by the religious excitement of that revival, became more frequently chronic than the majority of other cases. That suggested an element of difficulty in regard to prognosis which was interesting, taken in connection with another difficulty. They often found that the daughter of an accomplished gentleman, of good society, and who had been brought up in the lap of luxury and refinement, would, upon the development of insanity, give utterance to the most filthy and indecent expressions. In this case had the insanity warped the power of self-control and prevented the elegantly-nurtured young lady from controlling the impulses which were natural to herself, or was it owing to the fact that, when insane, she would evolve apparently out of her own mind what was incoherent in it? In this question a great deal was involved bearing upon prognosis. In the case of religious rhapsody it was very often found that that which had last caused the greatest impression on the mind was brought out most prominently in the earlier development of the disease, but in the case of the bad language there appeared brought out what most probably had not been a late impression, but could only be accounted for upon the assumption that in early years, when the mind was very impressionable, the patient might have heard those things from servants and otherwise. Now, the question might arise as to which of the states of the brain thus indicated was the more likely to recover normal health, and he hoped that other speakers would help them to unravel the mystery.

Dr. Savage remarked that in matters such as that now before them, it was a pity they could not all sit together round a large table and talk it out. The subject was one upon which everyone knew something, and if the question passed round were, "What were the greatest mistakes you ever made?" the results would be very edifying. During the reading of the paper he himself had put down a few of the cases in which he had made gross mistakes. Alcoholism was one of these. Did they all get well? It seemed to him there were certain cases which never did recover. Syphilis was looked upon as most curable, but they had most of them had experience of cases suffering from syphilis—syphilitic history and syphilitic symptoms without any doubt—yet they could do no good with them; and he was afraid they were likely still to have such cases. It only made one hesitate about giving any prognosis. He remembered years ago meeting a physician in consultation, to whom he gave his opinion, and said, "I think the patient will get well probably in three or four months" The physician turned round and said, "You are paid for an opinion, and not for a prophecy. I have given up prophecying for thirty years." The question arose, by the way, whether, where they did not believe there was any chance of recovery, they had a right to hold out hope. There were certainly classes of patients who seemed incurable. Such were cases of delusional insanity, with hallucinations of all the senses, persons believing they had galvanic batteries inside them; persons who believed that smells and fæces were always being poured into their rooms, and so forth. Still, in cases where he had given very bad prognoses the patients did get well. One in particular he could think of, who was recovering, although he had thought there was no prospect of it, but there perhaps the questions suggested by Dr. Newington ought to have influenced his mind, for the patient had been a taker of morphia. There was hæmatoma of ear, too; and he remembered that up to recent times a person with a string round his finger was looked upon as not likely to recover. It was a question whether there was one condition which might be put down as hopeless. As to prognosis in youth, people came to him on visiting-days, saying, "I hope you think my son will get well; he has youth on his side." This was fallacious. With regard to the question often asked, "Do you think this person will have a recurrence?" he might say that in the more acute cases, and the cases in which what had been called "brain fever"—the acute delirious mania—had occurred, his opinion was that they were less likely to recur than others. Then, were cases more likely to recover because the cure was rapid? One read in text-books that the prognosis was worse when the patient got well rapidly. He feared that was a fallacy, or, at all events, a question for further consideration. He had briefly referred to some of the many stumbling-blocks he had met with in regard to prognosis, and hoped that the other speakers would add information upon the subject.

Dr. Mercier, after referring to the many points opened up by the paper, said that he could heartily endorse Dr. Newington's first conclusion, that when friends of patients asked questions the best way was to take them into their confidence. The time had gone by when the medical man could pose as an oracle, and much more good was to be gained by gaining the confidence of the patients' friends. There were many cases in which no certain prognosis could be given, and if they did not take the patients' friends into their confidence they must shuffle, and that was neither dignified nor right. Dr. Newington had mentioned an exceedingly interesting case of a patient who appeared to be the subject of general paralysis with a perfect assemblage of symptoms, but who afterwards, as it appeared from history, might have had all the symptoms accounted for by previous circumstances of his life. Dr. Newington said that the history might mislead, but it struck him (Dr. Mercier) that the history might account for the disease. It was impossible to take any one factor; they never got the same assemblage of factors and symptoms, and each case must be taken upon its own merits. There was a certain class of hallucinations in which he thought they were almost justified in giving a competent prognosis,

and he might say that in his own experience, where they had hallucinations of hearing, associated with alcoholism, with the prolonged use of alcohol the prognosis was decidedly unfavourable. He had never known such a case to recover. As to rapid recovery, he had been told by an experienced alienist always to expect a relapse in such cases, and in the instances which had come under his notice this had been verified.

Dr. HACK TUKE was glad that Dr. Newington had referred to the conditions of the patient in the future as well in the past, and laid great stress upon that. It was a most important point, and, of course, introduced an element of very great difficulty. Dr. Newington had referred rather to the unfavourable conditions which would arise; but they ought also to take into account the favourable ones, among which might be quoted the effects of change. A prognosis most unfavourable might be given and remain true up to the time of a change of residence. In assuming the importance of heredity in giving prognosis, Dr. Newington, no doubt, referred rather to the question of relapse than of recovery from the first attack. If not, probably more stress might have been laid upon the probability of recovery from the first attack, even with strong insane inheritance. He (Dr. Tuke) did not doubt that the fact of inheritance would make relapse more probable. A much more important consideration, and one to which Dr. Newington just referred, was the constitution of the patient. Though he might have no insane ancestors, one so often found, on examining a case, that the patient had been somewhat peculiar throughout life, and taking that into consideration, the prognosis would have to be very unfavourable; whereas, if there were a distinct change from the natural character from some cause, the prognosis would be comparatively favourable. With respect to what Dr. Stewart had remarked, it had often struck him that one reason why ladies carefully brought up gave expression, when they became insane, to such bad language, was that the very fact of the restraint which had been used by them while they were well to avoid expressions of that kind, and in every way to get rid of them—the strenuous effort made to keep the mind clean—resulted, when insanity took place, in a reactionary outburst of the foul language which had been repressed when the patient was sane. He had been very much interested in the paper, and it struck him as very remarkable that they had never had one read so specially upon prognosis, except, indeed, that by Dr. Sutherland. Probably the reason of this was the extreme difficulty of speaking in any way dogmatically upon the point, and laying down definite rules.

The PRESIDENT said that as he must then leave, he would take that opportunity of expressing his thanks to Dr. Newington for his paper. He agreed with Dr. Savage that it was a paper opening up many important questions, and one upon which all present might have something to say; and in saying these few words he could not attempt to exhaust the subject, but only wished to thank the author of the paper and to express his regret at having to leave before the end of the meeting. No doubt what Dr. Hack Tuke had said as to the paucity of papers on prognosis was true. It might be owing to the fact that the particular class of patients who came under Dr. Sutherland and Dr. Newington's treatment had relatives who were much more desirous of obtaining information about their afflicted friends than some others were. He himself was at the extreme opposite pole in regard to that. There was in his own case, certainly, no excessive haste and eagerness among friends to gain information as to the patients; and they could imagine the difficulties which physicians laboured under in such circumstances.

Dr. Rayner then took the chair.

Dr. HAYES NEWINGTON, in reply, said that he knew that he would hear some remarks as to the wideness of the subject. He was alarmed when he found that he had written so much, and, as a matter of fact, he had knocked off about a third; which would account for Dr. Hack Tuke not hearing about many cases where favourable results had occurred. With regard to Dr. Savage's remark on the ethical question, whether one was justified in giving a

prognosis when they saw such a case as that of the general paralytic to whom he had referred living twenty years in comparative comfort, he thought one might say that no case was incurable; and so the ethical question suggested need not arise. As to youth, he had very much the same views as Dr. Savage. It must, of course, be borne in mind that youth was a kind of sieve, being the first critical time at which hereditary predisposition showed itself; and in these cases heredity was an important consideration. As to Dr. Mercier's remark on the paralytic case, he was entirely at one with him. He really wished to accept the history, but the opinions of two physicians of the first order had forced him to abandon that view.

Dr. MERCIER asked whether the physicians were in possession of the history?

Dr. NEWINGTON said he thought so. He then referred to Dr. Hack Tuke's remark as to the change of a patient from one asylum to another, and said that he should probably have introduced that into his paper if he had had time. He had seen good results from it, and had been going to suggest that some energetic superintendent of a county asylum should make a suggestion to his Committee as to an exchange with another asylum of cases which were hanging fire. He had seen this done at Morningside. With respect to Dr. Orange's remark as to the friends requiring information, the truth was that they had to pay a great deal of attention in private asylums to the friends' wishes. In county asylums medical superintendents really did not have meetings with the friends to anything like the same extent.

Dr. BONVILLE FOX read a paper on "Exaltation in Chronic Alcoholism." (See Original Articles).

Dr. RAYNER said he felt sure they must all thank Dr. Fox for his paper. He only regretted that the lateness of the hour would not permit their entering upon any full discussion of it that afternoon. If they attempted to commence a discussion of it, he feared that justice could not be done to it in so brief a time as remained at their disposal. He would, therefore, leave it to the meeting to say whether the discussion of the paper should be postponed to the next meeting; or would Dr. Fox be disposed to allow it to pass undiscussed? There still remained to come on resolutions standing in the name of Dr. Mercier of considerable importance, and he thought the meeting would like to be able to deal with them before separating.

Dr. BONVILLE FOX said that he would defer to the wish of the meeting.

Dr. STEWART said that Dr. Fox's paper related to a matter of such general interest now, that it would be a great pity if an Association such as theirs should lose the opportunity of discussing it. If no one else would step into the gap, he should be very happy to introduce the subject in some short way at their next meeting, which, however, would be the annual one.

Dr. RAYNER said it was quite in the power of the meeting now simply to adjourn the discussion.

Dr. STEWART said he would move that the discussion of the paper be postponed to a future meeting; that would leave the question open.

Dr. SAVAGE seconded the motion, which was carried; Dr. HACK TUKE remarking that if the space in the Journal permitted the paper should appear in the July number, in which case the members would be able to have it before them and discuss it at the next meeting.

Dr. MERCIER then read the following:—I desire to draw your attention to a class of persons, probably the most unfortunate and the most unhappy in Her Majesty's dominions; and not only to them, but to another and probably more numerous class—our fellow-countrymen, who are immured in the asylums of foreign nations, and are separated by impassable barriers from their country, their home, and their friends. The facts are doubtless sufficiently familiar to all present, but this is one of those cases in which familiarity has, I will not say bred contempt, nor even indifference, but has allowed all vivid recognition of the facts to lapse out of consciousness. In the same way those who are always resident in a mill become at length unconscious of its

uproar. It may not, therefore, be superfluous to dwell on the subject with a little insistance. The lot of a lunatic sequestered in an asylum is at the very best a forlorn and pitiable one. It is pitiable even when it is alleviated by every amelioration that affection can prompt, that ingenuity can devise, or wealth can purchase. Even the lunatic who is blest with abundance of this world's goods, and with the more effectual solace to be found in "troops of friends," is in pitiable case, for he is deprived of the most precious of all human possessions—his personal liberty. The fate of the pauper lunatic is far harder; but few of us, I venture to think, familiar as we are with the facts, realize the full severity of what they have to bear. They live a life in common; solitude and privacy are to them unknown. Day and night, month by month, and year after year they are compelled to associate with companions whom they have no voice in choosing, and whose manners and habits are many of them distasteful and repulsive in the extreme. Of the chronic lunatic it may truly be said that he labours without reward, he lives without hope, and he dies unregretted. Dark as this picture is, it by no means represents the worst. There is one class of lunatics the special hardship of whose lot forms a conspicuous feature in every report of the Commissioners in Lunacy, and whose troubles form a perennial text for their homilies. These are the out-county patients; and we are all familiar with the forcible expressions with which the Commissioners refer to the justice of their complaints that all access of friends is denied to them. Confined in an asylum outside the limits of the county to which they belong, they are so far separated from their homes, either by distance or by time, or, what is equivalent to both, by expense, that they are precluded from even an occasional visit of those who are near and dear to them. Still, however, they are among their fellow-countrymen. They are among those whose manners and customs and ways of living are akin to their own, who speak the same language, and to whom they can without difficulty make known their wants. It is far otherwise with the unfortunate people on whose behalf I now appeal to you. Separated from their native country, from home, from family and friends, there are not a few of these unhappy beings who are unable to speak a word of the language spoken around them, and who are as completely cut off from all human converse as if they were condemned to perpetual solitary confinement. In the midst of a crowd, they live a life of unutterable loneliness. The people by whom they are surrounded, but from whom they are separated by a barrier impassable, although impalpable, are foreign to them in language, in habits, in mode of life, and in religion. Deprived of country, of home, of liberty, of reason, and of all companionship, their lot is one which, for the elements of unhappiness that it contains, can scarcely be paralleled among the human race. When we remember that this description applies not only to those citizens of foreign nationality who are immured in the comfortable asylums of our own land, but, in a still more aggravated sense, to those of our own countrymen who are sequestered in the bare and comfortless asylums of some continental countries; when we remember that the system of management and treatment of lunatics is not in all countries as humane and merciful as it is with us; when we bear in mind that the roving disposition of our race must ensure the existence of a greater number of Englishmen in foreign asylums than of foreigners in the asylums of this country; the appeal to your sympathies and to your sense of justice will become, I hope, irresistible. The resolution that I have the honour to propose formulates a principle. It does not attempt to enter into details of practical working, for that is, as I imagine, not within the scope of our functions. The difficulties in the way of making a working arrangement may be great, may, if you please, be insuperable; but what does man come into this world for, but to make difficult things easy, and impossible things possible? If we do not move in this matter, no one else will. But our function is to supply not the machinery, but the force to move the machinery. The evil will not be remedied until the facts are known, and unless we publish the facts, they will

not be made known. We may not succeed, but we can at least do our best, and attain the relief of knowing that the responsiblity for the evil does not rest upon those who have done their best to remedy it. I beg to move--

(1) That, whereas the confinement of persons in lunatic asylums of nationality foreign to their own places such persons in a position of peculiar and exceptional hardship, it is, in the opinion of this Association, extremely desirable that arrangements should be made between this and other nations for the transference of such persons to the country to which they belong. (2) That a copy of the foregoing resolution be forwarded to the Secretary of State for Foreign Affairs (with an explanatory note).

Dr. HACK TUKE seconded the motion, saying that in travelling in France and Germany he had seen some of the disadvantages under which English patients in foreign asylums laboured, and he could endorse what Dr. Mercier had said. Undoubtedly, however, the evil was much greater in regard to foreign patients in English asylums.

Dr. RAYNER said that he could endorse what Dr. Mercier had said respecting foreign lunatics in English asylums, and there could be no doubt that their condition militated against their recovery. He had mentioned this fact in one of his annual reports. The proportion of foreign lunatics at Hanwell was double what it ought to be, which might be partly due to the want of recoveries, partly to the natural attraction which a large town like London had for insane persons of a roving disposition, and partly also to the indifference to the shipment of lunatics to this country. In New Zealand, Australia, and elsewhere very stringent rules were made to prevent shipment of lunatics. In England there were no rules, and as a consequence we get more for our share. Having regard to this, he doubted whether they would find that the proportion of Englishmen in foreign asylums did bear such a proportion to the number of Englishmen scattered over the face of the earth, because foreign countries took care to get rid of English lunatics. The subject was of great importance, and he thought that Dr. Mercier's proposals should be adopted, both from a scientific and a politico-economical point of view.

The motion was carried unanimously.

The proceedings then terminated, and the members afterwards dined together at the Holborn Restaurant.

Correspondence.

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—If Dr. Huggard's criticisms of my Definition of Insanity are left unanswered, it may perhaps give rise to the impression that I regard them as unanswerable, but at the same time they exhibit so complete, fundamental, and far-reaching a misapprehension of my position that I despair of being able to deal with them within the limits of a letter, and must leave the matter over until I can deal with it at such length and with such completeness as will not, I trust, leave room for further mistake.

I would point out, however, that while in his first criticism Dr. Huggard attributes to me words that I never used, he gives, in his second criticism, to the words I did use, a meaning widely different from that in which they were employed by me. When I speak of the environment as a "term," it is, as is clearly laid down in the page from which Dr. Huggard quotes, as the term of a relation—as "one of the terms between which the relation subsists." Dr. Huggard deals with it as if I used it in the sense of a logical term—a distortion of meaning which partakes of the nature of a pun.

Yours truly,

CHAS. MERCIER.

April 10.

AFTER-CARE.

The Annual Meeting of this Society will be held on Thursday, the 3rd of July, at 3 p.m. Lord and Lady Brabazon have kindly allowed the meeting to take place at 83, Lancaster Gate.

H. HAWKINS,
Hon. Sec.

Chaplain's House, Colney Hatch,
June 15, 1884.

BRITISH MEDICAL ASSOCIATION.

ANNUAL MEETING, BELFAST, July 29th, 30th, 31st, and August 1st, 1884.

SECTION—PSYCHOLOGY.

President ... GEORGE HENRY SAVAGE, M.D., London.
Vice-Presidents ... D. HACK TUKE, M.D., London.
ISAAC ASHE, M.D., Dundrum, Dublin.

DEAR SIR,—We beg to remind you that the next Annual Meeting of the British Medical Association will be held at Belfast on Tuesday, 29th July, and the three following days. In the Section of Psychology, in addition to the usual papers, the following special subjects have been selected for discussion:—

1. *Employment of the Insane.*
2. *Varieties of General Paralysis.*
3. *Use of Alcohol in Asylums.*
4. *Moral Insanity and Imbecility.*
5. *Legal Persecutions by Discharged Patients.*

We trust that you will be able to be present at the meeting, and to take part in the discussions. Although it has been thought desirable to introduce special subjects for consideration, it is by no means intended to exclude other topics, and we shall be happy to receive any communication which you may desire to bring before the Section. The titles of all such papers, and notices of intention to join in the debates on the first three of the special subjects above, named, should be sent to us not later than the 28th of June. It is necessary that abstracts of all papers to be read in the Section should be sent to us before the 12th of July.

We are, dear Sir, yours faithfully,
ALEX. STEWART MERRICK, M.D.,
District Asylum, Belfast.
S. REES PHILIPPS, M.D.,
St. Ann's Heath, Chertsey.

N.B.—No paper must occupy more than 15 minutes in reading, and subsequent speeches are limited to 10 minutes.

REVUE BIBLIOGRAPHIQUE UNIVERSELLE DES SCIENCES MÉDICALES.

We have been requested to insert the following:—

Revue bibliographique universelle des Sciences médicales avec Index alphabètique annuel indiquant les matières contenues dans les journaux spéciaux et les ouvrages publiés en toutes langues et dans tous les pays, classés d'après l'ordre méthodique des sujets traités, suivi d'une Table alphabètique des auteurs, publication mensuelle dirigée par le Docteur Cte. Meyners d'Estrey.

L'objet de cette Revue est de mettre le praticien et l'auteur à même de retrouver immédiatement les sources à consulter pour un sujet quelconque.

La Revue Bibliographique formera tous les ans un fort volume grand in-8° d'au moins 600 pages. Prix de l'abonnement: 30 fr. par an. Pour s'abonner, il suffit d'écrire à M. Ch. Grèmiaux, secrétaire général, place Saint-Michel, 6, Paris.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE ANNUAL GENERAL MEETING

Will be held at the

ROYAL COLLEGE OF PHYSICIANS, PALL MALL, LONDON,

ON WEDNESDAY, THE 23RD OF JULY, 1884,

Under the Presidency of H. RAYNER, M.D.

I. MEETING OF COUNCIL AT 10.30 A.M.
II. GENERAL MEETING AT 11 A.M.

AGENDA:

1. Dr. ORANGE will resign the Chair.
2. Reading the Minutes of the last Annual Meeting.
3. Statement of Accounts.
4. Election of Officers and Council.
5. Fixing the Place of next Annual Meeting.
6. Election of New Members.
7. Election of Honorary Members.
8. Reports of Committees.

AFTERNOON MEETING AT 2 P.M.

1. The PRESIDENT'S Address.
2. Paper by Dr. NEWTH, on the value of Electricity in the Treatment of Insanity.

The ASSOCIATION DINNER will take place at "The Ship," Greenwich, at 7 p.m. Members wishing to attend are requested to communicate their intention to the Treasurer, Dr. PAUL, The Terrace, Camberwell, S.

LUNACY AND PAUPERISM.

At a recent Poor Law Conference in Glasgow, Dr. Yellowlees read a highly interesting paper on the above theme. He urged that every county or district should have two types of asylums for its pauper insane; one a hospital, fully equipped with the best means of treatment, and receiving all new cases, the size not exceeding 300. Another building, erected at half the cost, should be devoted to chronic cases only, and should receive no patients except from the cure-asylum.

ALCOHOLIC BEVERAGES IN ASYLUMS.

The following circular has been forwarded to the Superintendent of every Asylum in Britain, except Private Asylums. Should any Superintendent not have received one, he is requested to communicate with the undersigned:—

1. Average number of Patients resident during last year (1883).
2. Persons having their Meals in Asylum in addition to Patients.
3. Do you give Beer or any Alcoholic other than medicinally? And if so what is the allowance?
4. If not, do you give any substitute?
5. What was the average weekly cost, per Patient, in 1883, for supplying Alcoholics (including Brewery expenses, when Beer is brewed in Asylum)?
6. What was the expenditure during the above year in—(1) Beer, (2) Porter, and (3) Wine or Spirits, respectively?
7. Are your Attendants and Servants allowed Beer?
8. If not, what, if any, substitute or equivalent do you give?
9. If Beer and other Alcoholics have been disused as a beverage in your Asylum, will you briefly state your views as to the result upon the health of the Patients and the discipline of the Wards?

Please address reply at early convenience to

DR. D. HACK TUKE,
Hanwell, W.

Appointments.

GRANT, HENRY L., Assistant Medical Officer at Garlands Asylum, appointed Assistant Medical Officer to the Buckingham County Asylum, Stone, near Aylesbury.

HUGGARD, W. R., M.A., M.D., appointed Assistant Physician to the West End Hospital for Diseases of the Nervous System, Paralysis and Epilepsy.

KING, THOS. RADFORD, M.D.Ed., appointed Resident Medical Superintendent, Hokitika Hospital, New Zealand.

PHILLIPS, SUTHERLAND REES, M.D., M.Ch.Q.U.I., appointed Medical Superintendent of the Asylum, St. Ann's Heath, Chertsey.

SCOTT, J. W., late Surgeon R.N., appointed Junior Assistant Medical Officer to the Hants County Asylum, Knowle, Fareham.

SHELDON, THOS. STEELE, M.B.Lond., M.R.C.S., Appointed Medical Superintendent of the Chester County Asylum.

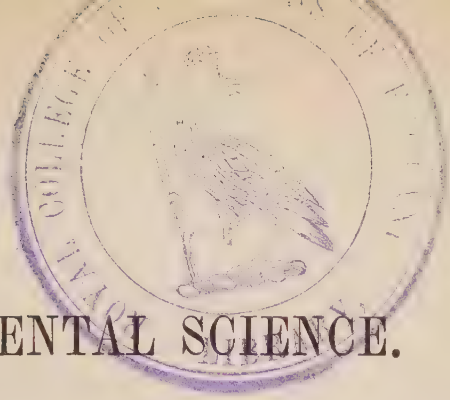
SMITH, WM. BEATTIE, F.R.C.S., L.R.C.P.Ed., appointed Acting Medical Superintendent of Sunbury Lunatic Asylum, Victoria.

TATHAM, C. J. WILLMER, M.R.C.S., L.S.A.Lond., appointed Assistant Medical Officer, Warneford Asylum, Oxford.

ERRATUM.

In the April number—page 40, line 2, for "certain" *read* "uncertain."

We regret being obliged to postpone to a future number a review of the Collected Articles of the late Professor Laségue, of Paris. His "Études Médicales," edited by M. Albert Brun, are in two large tomes, and are a mine of scientific wealth.



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PART 1.—ORIGINAL ARTICLES.

Presidential Address, delivered at the Annual Meeting of the Medico-Psychological Association, held at the Royal College of Physicians, London, July 23rd, 1884. By H. RAYNER, M.D.

GENTLEMEN,—I cannot commence my address without reminding the Association of the regrettable circumstance which has resulted in my having had conferred upon me the honour of occupying this position to-day.

Dr. Manley, who had been elected President at the last annual meeting, would have officiated in that capacity on the present occasion had not an attack of illness unfortunately compelled his resignation. I am assured that the Association will sympathise with me in my regret at not being a listener to-day to the rich stores of information which Dr. Manley's ripe experience would have furnished, and will unite with me in the anticipation that, with restored health, at a future date Dr. Manley may yet fill the Presidential chair.

For myself, called upon somewhat late in the year to occupy this post, I could have wished for a few more years of experience before undertaking this duty, and a few more months in which to have collated facts in relation to the subjects I am about to bring under your consideration. For the purpose of an illustration, a man's mind may be considered as a solvent for experiences, and it may be held to be desirable, in psychic as in chemic processes, that the solvent should have approached saturation before crystallization is commenced. I feel that I should have desired a denser solution from which to deposit thought-crystals, to be submitted to the critical examination of this Association, although I am assured of personal consideration for my shortcomings.

Mental disorders constitute a subject so extensive and many-sided that it would seem impossible that there should be any difficulty in selecting an aspect or relation from which to view them with some prospect of novelty. My illustrious predecessors in office, each delving at a special side of the subject, have however, scarcely left an opening which I can assay without tempting a, to me, invidious comparison. Thus, in recent years, the History of Insanity has been graphically described by Dr. Hack Tuke, Mental Pathology by Dr. Maudsley, Therapeutics by Dr. Crichton Browne, Legal Relations by Dr. Orange; and I might extend the list still further to show that the past and present have been so fully covered that only the future of insanity would appear to be left for consideration.

The future of insanity, indeed, offers a large and important subject for speculation, whether considered in relation to legislation, probable increase, or progress in curative and preventive measures; and to these points I shall specially endeavour to direct attention.

The Association is aware of the fact that "The Consolidation and Amendment of the Lunacy Laws" is the title of a Bill that has been announced as one of the Government measures in the next Session of Parliament.

Legislation in this direction has been pending for several years past, and from the uncertainty pertaining to Parliamentary performance may still be deferred; but so definite and authoritative a promise as that which has been recently given, renders it at least probable that this is the last opportunity that may occur at an annual meeting of our Association of expressing opinions on some of the most important matters involved in this legislation, many of which seriously affect the welfare of the insane and the professional interests of alienist physicians.

The private asylum question is foremost among these, forming the basis on which rests the agitation that has in great measure brought about the desire for legislation.

The agitators who inaugurated this movement have not refrained from casting the most virulent aspersions on the moral and professional character of the private asylum proprietors, who constitute an important part of our Association. These gentlemen are debarred by the circumstances of the case from answering the vilifications thus shrieked at them; and I strongly feel that I should be neglecting a duty, as your President, and as a disinterested member of this Asso-

ciation, if I did not emphatically express my opinion as to the gross character of these aspersions, and my belief that they are without any foundation whatever in existent facts.

The result of the recent Parliamentary Commission would have entirely exonerated the proprietors of private asylums in the eyes of all but persons whose minds were prejudiced by imaginary wrongs, or by the remembrance of a past state of things, or by the desire to reap advantage from coming changes.

The *total abolition* of private asylums is one of the stock cries of these agitators, and has been re-echoed even by some of our medical authorities. The advisability of this procedure is a fair subject for debate, but, when considered with a view to practical results, it must be remembered that at present the State has made no provision to replace the private asylums, and that to accomplish this would require time and a very considerable outlay of capital. Due consideration also should be given to the fact that the private asylum proprietors have hitherto provided for a great public need, and have invested both professional reputation and capital to this end.

A gross injustice would be committed were any great change made without recognising these circumstances.

If fair recompense were made by the State, most private alienists, I believe, would welcome the abolition of their establishments.

That such a change is right and politic is by no means certain.

If the State assumes the care of every insane person, such a measure might be practicable; but so long as the guardianship of the insane devolves upon the relatives the right of contract must also remain. The State has no more right to insist that a father should send his insane son to a State asylum than to insist on his sending his sane son to a Board School, provided the father possess means to make a better provision, or one more in accordance with his own views.

On the professional side, justice would seem to demand that the physician who has obtained special reputation, or experience in mental diseases, should not be debarred from reaping the advantages thereof to himself, or from being of service to his fellow-men.

Legislation of the character proposed would involve an unprecedented deprivation of liberty of action to the friends of the insane and to members of our profession.

I believe that the absolute *compulsory* closure of the private

asylums would, at no distant date, direct popular prejudice against the public asylums. The allegation would soon be made that the superintendent of a public institution, whose increase of salary depended on the monetary success of his establishment, had considerable temptation to prolong the detention of well-paying patients.

The physicians appointed to such public asylums might not always be selected on the strict basis of fitness. Nepotism is not yet absolutely dead, and, in the future, political lobbying, as in the United States, might make one road to such appointments.

The abolition of private asylums ought logically to involve the abolition of single patients; yet this last is a mode of treatment strongly advocated by some of the medical opponents of the private asylums, and is apparently regarded by the Lord Chancellor's visitors as the *summum bonum* of insane care.

The duty of the State would seem to be primarily demanded for the provision of such institutions as are a public necessity, and there already exists a great and urgent public want of institutions where insane and imbecile persons can be treated at a cost of from ten to fifteen or twenty shillings a-week. At present, a large number of persons are most unjustly in pauper asylums, on the footing of paupers, whose maintenance is entirely paid for by their friends; and a large number of imbecile children are retained at home without treatment because their friends object to sending them to pauper imbecile asylums, and have no other alternative. The lunatics who are paid for are sometimes much annoyed at their position, and at other times are irritated by not being treated in a different manner from the absolute paupers. This enforced pauperisation induces relatives to avoid their responsibilities, either wholly or in part; while they would probably be stimulated to greater exertion if their insane relatives could be differently classed.

Some public institutions have a few patients already at the rates indicated, while others, that at one time devoted many of their beds to this class, have been tempted from their purpose by more lucrative inmates.

The need for public institutions of the character I have described is both great and urgent, and I would suggest that the opinion of the Association should be forcibly and practically expressed on this point.

Apart from the provision of such asylums, the onus lies on

the State to prevent unfair contracts or the abuse of the laws with regard to the care of lunatics; and any safeguards or supervision that may be deemed necessary to accomplish these objects will be hailed with satisfaction both by the specialty and the profession at large.

The *order of admission* to private asylums is presumably one of the leading subjects to which legislative attention will be directed. In discussing this, recognition should be made of the fact that relatives, in sending insane persons to an asylum, are only providing for their proper treatment, and that to delay or hinder this by legislative enactment is as inhumane to insane persons as it would be to persons suffering from inflammation of the lungs or broken legs.

The hindrance to treatment caused by the present system of certification, from being habitual and customary, has come to be almost regarded as a necessary and unavoidable evil.

The delay arises from a variety of causes; foremost is the prejudice against certification, a not unnatural one when consideration is given to the popular views of insanity and the lifelong *stigma* cast upon the individuals and their relations by being practically branded as insane. Can it be wondered at that medical men delay such a proceeding by every possible means? Even when the medical attendant has brought himself to express his opinion of the necessity of such a procedure, the friends will often not yield their consent for a considerable time.

Beyond this again, comes the delay in fulfilling the necessary formalities.

In some cases, owing to fear of possible litigation, a medical man refuses altogether to sign certificates, and another has to be sought, who may require time for examining a patient whom he has not seen before, and whom another practitioner has refused to certify.

Where the medical attendant is willing to undertake the responsibility, and knows, or is of opinion, that the person is insane, certification may still be delayed from hesitation as to being able to describe in writing the symptoms perceived in a way that shall prove the existence of insanity and form a valid certificate.

In reference to the prejudicial results of these delays, I have the opinion of two medical coroners, of large Metropolitan districts, that suicides have directly and indirectly resulted from them, and, I believe, that if the attention of

coroners throughout the country could be directed to these matters, ample testimony of a similar character would soon be accumulated. Instances of homicide and other criminal acts, resulting from the same causes, might, I believe, be also adduced; of injury to bodily health and impairment of prospect of recovery, many members of this Association could largely testify.

The remark has been made that when a law is bad or unnecessary, it is usually broken or avoided by public consent in the most wholesale manner, and this appears to be the case with regard to certification.

Hundreds of insane persons are yearly taken from their homes and are detained for days in workhouses without being certified. The necessity and practical advantage of this procedure is recognised and admitted.

Many of these workhouses are in no respect adapted to the treatment of the insane, and yet if these persons were similarly taken to asylums, where all available means are provided, what an outcry would result.

Private patients also have been not unfrequently deprived of all liberty of action for weeks or months before their removal to an asylum; so that as a mere safeguard of personal freedom, certification would appear in practice to be useless.

The opponents of the present lunacy-laws have often spoken of the power of giving certificates as if it were a valued privilege of the profession, while the fact is that it is a disagreeable duty, which commonly entails loss of practice. An old practitioner once told me that he had never signed a certificate of insanity without losing his attendance on the family in which this had occurred. Moreover, it is a duty that I consider ought never to have been thrust on the profession, to be discharged at haphazard by any member, however unqualified or unwilling to undertake it.

If the State requires certificates of this kind, trained and specially qualified medical officials should be appointed to furnish them.

Lord Shaftesbury recently pointed out that "since 1859 there had been 185,000 certifications, every one of which had been found just and good." This alone should show how little real danger there is of attempts being made to incarcerate sane persons in asylums. I would suggest that this danger would be better met by stringent personal examination by governmental officials after admission, of all patients received into private asylums, or private care, rather than by causing

the delays of treatment with the attendant evils which are now incurred.

Better by far that in the 185,000 certifications there should have been a few cases of wrong admission than that a single death by suicide or a single loss of recovery should have resulted from these precautions.

I should regard any addition to the present bars to the treatment of the insane as savouring of a cruel and inhumane disregard of their real well-being, based upon the survival in the public mind of that old prejudice against insanity, founded on the erroneous belief of demoniacal possession.

This it is that leads even the most intelligent and well-meaning layman to give attention to the clamorous exaggerations of demi-lunatics. Against this prejudice our specialty must never cease to fight, until our asylums become hospitals, and our patients are regarded and treated as human beings suffering from bodily infirmity.

This, however, is the age of the tyranny of minorities, and it is probable that further obstacles to treatment may be developed by coming legislation.

The suggestion that meets with most favour from intending legislators, provides that the order of admission to private asylums should be signed by a magistrate on the petition of relatives or friends.

We must hope that the magistrates' duty will be limited to ascertaining that the medical persons signing the certificates are qualified to discharge that function, and are not in any way contravening the provisions of the statute. Fortunate indeed will be the insane if they escape thus lightly, and are not required to demonstrate their insanity to the magistrate at least, if not to an intelligent jury.

The State, having duly satisfied itself in regard to the legality of an admission to an asylum, ought to ascertain, at the earliest possible date, that there was a medical necessity for such procedure. This should be accomplished in such a way that neither the patient, his friends, nor a court of law could at any time doubt for a moment that the person admitted was insane. The onus of this duty should not be thrown on the private asylum proprietor, who is not in any sense a servant of the State. At the earliest possible date after admission the patient should be visited, and his insanity tested and certified by one of the present Lunacy Commissioners, or by medical Sub-Commissioners, or by district medical inspectors of the insane. Four or five additional

officers ought easily to perform this duty, even if the registered hospitals were included, the admissions in 1882 having been only 1,096 to the licensed houses, 106 to single care, and 896 to the lunatic hospitals.

If this duty were efficiently performed by responsible officials, under the direction and supervision of the Lunacy Commissioners, much would have been effected to remove the clamour against private asylums and the Lunacy Laws.

The supervision of the detention of the insane might be carried on by the same officials in their visits to certify the admissions. The total number of private patients being only about four thousand, this task would not be too heavy, and should in some measure be made to relieve the work of the present Commission.

The necessity for some aid to the Lunacy Commission must be obvious, when it is considered that since its appointment the number of lunatics and of asylums has more than doubled, while the complexity of the functions discharged has been almost indefinitely extended.

So great an increase in the extent and importance of the duties of the Lunacy Board demands that there should be a considerable increase in their rate of pay. This formerly presented a respectable contrast with that of asylum-superintendents, but at the present time the general difference is not very large, and there are several asylum posts at least which are quite as lucrative as a commissionership.

It is to be feared that in the future the best men will not be attracted to the Commission unless some such change be made, and that the influence of the Commission will thereby undergo considerable diminution.

The increased power of supervision which would be gained by the appointment of sub- or deputy-commissioners, should tend also to obviate the danger which at present exists of the friends of patients, both in private asylums and public lunatic hospitals, taking charge of them against the advice of the medical officers. This action on the part of friends not rarely leads to suicide, and constantly to relapses and damage to the patients. The knowledge of individual cases which the sub-commissioners would acquire should enable them to support medical officers in preventing such ill-judged action on the part of friends.

The appointment of additional medical help to the Lunacy Commission should tend also to remove the present anomaly

of barristers being called on to express opinions on conditions of disease which demand at least a medical training, if not a special experience in the study of insanity.

The County Boards Bill is a legislative bogy that has been shaken before our eyes for many years past. This at present seems very remote, but when the evil does arrive, it may be found that the interests of the insane may not be affected in the unfavourable manner that has been anticipated. Before this arrives it must be devoutly wished that a Minister of Public Health may be appointed, and that insanity may fall under his control.

In any case, the Association should not fail in repeatedly bringing to the notice of the Government the resolutions adopted by this Association in regard to the application of the Government grant to the maintenance of asylums, and in reference to the pensions of asylum medical officers being assimilated to those of the higher class of civil servants.

I would suggest also that representations be made in regard to increase of pay. This, at present, is fixed according to no definite scale, so that some medical officers, after many years of service, find their incomes of less value than at the commencement.

I would suggest that while there should be special increase for special good service, there should be a regular rate of increment, so that this should not depend, as at present, on any one of a score of accidental circumstances.

The future of insanity, in regard to the probability of increase, or even of decrease, is perhaps the most interesting of the forecasts of this subject, and is also of great practical import in connection with the provision of additional asylums or other accommodation. The accumulation of certified lunatics in recent years, constituting an advance from 36,000 in 1859 to 76,000 in 1883, has been due chiefly to several causes the relative values of which are unascertainable, and so do not afford data for estimates which might themselves be invalidated by the introduction hereafter of new disturbing causes. This only is certain, that the past apparent increase has not been due to a corresponding development of insanity in the community. This increase, apart from growth of population, has been chiefly due to the extension of the registration of lunatics, to the action of the Irremovable Poor Act of 1861, and to the Government Grant to Lunatics, 1874; to these may be added the increased longevity of lunatics in asylums. The two first causes have probably ceased to be

operative; the two latter have not yet exhausted their possibilities.

On the other hand, there are some favourable elements in the outlook.

The confinement of so many insane persons in asylums ought sooner or later to tell on the production of insanity by heredity.

Education, although as at present conducted productive of some amount of insanity, will ultimately prove one of the most potent agents in prevention, both by its direct and indirect influence. The increase of the wages and leisure of the working classes in recent years at first led only to additional intemperance, the sole recreation permitted them by the state of ignorance in which they had been kept. In the future education may lead them to more varied and intelligent recreation, with beneficial results to their mental health and temperance.

Temperance, from this and other influences, is making some progress in the working classes; and there is every reason to believe it will continue to advance, and in its turn favourably affect the statistics of insanity.

General paralysis of the insane appears to me to have been the one form of mental disorder in which there has been an undoubted and very considerable increase. Yet, even here, I believe that some favourable points may be found.

In my earlier experience, railway employés seemed to furnish an unduly large contingent of this disease, which has latterly diminished. This change being associated, I believe, with the relief from excessive hours of work which this class of men has obtained, I wish that the same relief could be gained for the police force, for London coachmen, and other classes who have unduly long hours of work, and who contribute an excessive proportion of this form of disease.

It would be impossible, in the time at my disposal, to give due consideration to the action of all the various causes brought into play by rapidly advancing civilization; and I must be content in pointing out the fact that during the last four years at least, the rate of increase of insanity appears to have been checked.

This satisfactory information is stated in the Reports of the Lunacy Commission, which show that the *ratio* of admissions per 10,000 of the population in the last four years has been 5·16, which compares favourably with 5·26, the average of the four preceding years.

From this and other considerations hope may be felt that the additional asylum accommodation to be provided for in the near future will not be so extensive as that which has been required in the past; and it would seem desirable that such future additions as may be necessary should be regarded as the completion of the structural apparatus for the treatment of the insane. On this view, opportunities hereafter arising should be used for correcting errors that have occurred in the past hurried provision for the sudden expansions of lunacy.

Of the various modes of providing increased accommodation, additions to old asylums appear to me to be the most costly, since they sooner or later entail complete structural re-organization of the whole administrative fabric, and the results of such changes are often otherwise unsatisfactory. Some of the old asylums, indeed, are structurally unfit for the treatment of recent cases on any large scale, and might with advantage be relegated to the reception of chronic patients.

Large imbecile asylums may possibly have the advantage of economy, yet I am unable to comprehend that the association in one large day-room of 140 imbeciles can be conducive to their comfort, especially at such a distance from their homes that they are practically divorced from their friends.

The *aged* imbeciles, if quiet and orderly enough to live in the same room with so many others, might surely be better provided for in their own parishes, where they might still receive some pleasure from the visits of their friends, on whom they would exercise the humanizing influence developed by bestowing care and attention on the sick and helpless. The present system, on the contrary, tends to produce in the poor the habit of shirking their responsibilities to their aged and helpless relatives.

The Poor Law system is not readily moved in the direction of more liberal measures, but I am assured that the more this question of the care of the aged poor is enquired into the greater reason will be found for a more philanthropic treatment in workhouses; and one result of this, if adopted, would be a considerable diminution of the numbers requiring imbecile asylum-accommodation.

In place of increasing imbecile, or enlarging old asylums, I trust all future opportunities will be seized to build hospitals or asylums of moderate size for recent cases, in which ample space, generous dietaries, and a large medical

staff shall be provided, in recognition of the fact, which cannot be too often repeated, that liberal (even lavish) treatment of insanity in its early stages is the truest economy, resulting in an increase in recovery-rate, and consequent diminution of the chronic insane.

The FUTURE of treatment is, I think, the most hopeful outlook of our present position, and I would that the prospect of prevention were as favourable.

In the memorable address of 1881, Dr. Hack Tuke pointed out the difficulty of proving by statistics that there had been any considerable advance in the proportion of recoveries, and I must confess my inability to prove, by direct reference to figures, that such progress has been made.

Indirect evidence, however, is not wanting. The increased number of general paralytics and of aged persons in the admissions of late years ought very considerably to have reduced the recovery-rate; this has not been the case, and the conclusion, therefore, may fairly be drawn that there has been an increase of recoveries among the smaller proportion of curable admissions.

Our *progress* in *treatment*, however, would appear to have been more conspicuous on the negative than the positive side, and to have consisted in great measure in clearing off established errors.

Long after Conolly had dealt the death-blow to mechanical restraint, chemical coercion survived in the form of tartrate of antimony, cathartics and narcotics. The abuse of these has been gradually dying out; and, as I am firm in the belief that the most troublesome chronic lunatics of the old *régime* were due to these abuses, I cannot but regard this as an immense gain.

The craving for *specifics*, which may be regarded as the search for a medical philosopher's stone, that should transmute disease into health, and in a few days undo the morbid nutrition of a lifetime, or even of two or three generations, has also died out.

Some alienist physicians are inclined to believe that our knowledge of the action of drugs on special parts of the nervous system may be used with advantage in forwarding the restoration of healthy nutrition of the brain; others, and I am one of these, believe that the difficulty of adjusting the dose, of regulating the intensity and duration of drug-action, has not been yet surmounted, and fear that collateral disadvantages, produced by these drugs in the disorder of assimila-

tion and nutrition, would always more than counterbalance any good that might be produced by their direct action on the nervous centres.

I must confess that I have rarely satisfied myself of having produced beneficial effects from the administration of such remedies; but, on the contrary, have often had no doubt whatever in regard to the evil done both by my own prescriptions and those of others. During the chloral epidemic a few years since, I saw several cases of mere brain-fag, or simple melancholy, which had been converted into protracted, restless, suicidal forms of melancholia by the use of chloral; and I have seen such ill-effects follow the use of other drugs, when used with the view of curing states of chronic malnutrition, that I feel it a duty thus openly to express my opinion. I do not, of course, debar myself from the use of them in cases of transient functional disorders.

Much has yet to be learnt in our attempts to influence directly the nutrition of the brain by the application of heat or cold, by electricity, by counter-irritation, or by local abstraction of blood. Dr. Tuke also will probably advocate the use of hypnotism and the influence of the imagination; but these are scarcely as yet within the range of practical therapeutics.

Whatever are the views held on the preceding points, all agree that reparative nutrition of the brain is not probable without an antecedent or corresponding improvement of the general bodily health, and that it is necessary to be a good general physician to become a successful alienist.

I have great pleasure in noting that the winner of the Association Prize Essay for this year, Dr. Rutherford Macphail, has, in Clinical Observations on the Blood of the Insane, directed his observation to the action of tonics on the blood, an earnest, I trust, of future exertions in this and similar directions.

The open-door system is a point of treatment which has drawn considerable attention of late. This has been ably discussed by Dr. Campbell in the last number of the Association Journal. I can add nothing to his acute examination; but would say that I agree with him, that evidence is required of the advantages of this plan, and in refutation of the *disadvantages* that have been imputed to it.

Asylum dietetics still offer a considerable field for progress and improvement.

The nutritive value of these, as far as I can gather from

past asylum-reports, has, in many instances, diminished during the past twenty years. This diminution, where it has occurred, may be said to be counterbalanced by a more liberal distribution of extras; but with the greatest care and attention, in this respect, a lowered diet scale is a source of danger to recent cases treated in large asylums, in which acute and chronic cases are mingled.

In variety of dietary much advance has been made—a fortnightly diet table having, in some cases, superseded the weekly monotony. I shall hail with congratulation the introduction of the first monthly list.

Beyond this, I think that more definite recognition should be given to the necessity for adapting the dietary to the winter and summer. Some such adjustment occurs in the natural course of events; but these modifications, resulting from season, might, with advantage, be increased, and be more definitely stated in asylum-dietaries.

While on this topic I would suggest that the Association should draw up and adapt an uniform system of diet scales, so that it may be possible to arrive at the absolute nutritional value of a given dietary, and to compare it with others. Some time since I endeavoured to make such an analysis and comparison of existing dietaries; but I must confess that I did not complete my task, the necessary computations being so numerous and perplexing. For example, in many diet tables, meat, uncooked meat, uncooked meat free from bone, were or were not distinguished, and this meat might, in quality, be beef, pork, or mutton, and, in state, be boiled or roast, salted or tinned. The *proportions* of ingredients in compound preparations were not infrequently described by that definiteness of quantity which is recognised in the expression, "the size of a lump of chalk." I will only add that my own diet-table may be taken in illustration of my remarks.

Apart from these questions, more systematic attention might be given to cooking. Good cooking depends on knowledge and labour: the latter is a drug in asylums, and the former might be increased by greater facilities for interchange of information, which might be furnished by a corner of the Journal being set apart for cooking queries and suggestions.

I cannot pass from the subject of dietary without alluding to the introduction of enforced total abstinence in asylums.

The chief arguments advanced in favour of this measure

are economy, benefit to asylum discipline, and advantage in treatment.

The economic argument may be dismissed, for there is not much doubt that the value of the beer will have to be supplied in another and possibly more expensive form; but this argument should not by itself be of value even if true.

If the distribution of beer leads to irregularities, this must surely be a matter of discipline to be overcome or avoided; and matters might be rendered worse by a regulation which would enlist the sympathy of friends, patients, and employed on the side of smuggling. This can scarcely be admitted as a valid reason.

It would seem unjust that because *A* drinks, *B* should be deprived of his beer; nor does it seem right to deprive a man of an habitual article of diet simply because he has become insane, since experience has taught that the deprivation of a habit may seriously interfere with nutritional repair.

Regarded as a therapeutic measure, it does not accord with the general plan of asylum treatment which aims at interfering with personal comfort as little as possible.

Even as special treatment for the inebriate, its advisability is open to debate. I believe that in these cases the most assured success is obtained where the *will* of the patient is enlisted, and habits of self-control are cultivated and developed; by this forcible proceeding, on the contrary, the will and desire of the patient may be arrayed against what may be considered an injustice. Formerly I recommended total abstinence to inebriates, but I found this so unsatisfactory in its results, that of late years I have insisted only that stimulants should never be taken except at meals, and then in a dilute form. This plan has been much more successful.

I have so frequently noted in the history of patients admitted within the last few years that the mental disorder had developed after a more or less protracted period of total abstinence, not always in intemperate persons, that I have been led to consider that there may be danger in recommending this, by itself, as a panacea for inebriety. In every case it should be accompanied by other changes in the mode of life; by suitable treatment, in fact. The necessity for this is widened by the knowledge that persons in moderately good health often suffer considerably in their attempts at total abstinence. The disregard of precautions in adopting teetotalism often leads to an intensified outbreak of intemperance, or to a break-down in the nervous system.

I shall require convincing proof of the advantages of this means of treatment before adopting it.

Much advance is still to be made in the amount of medical attendance to be given to the insane in this country. English asylums are built on the most liberal scale, but the medical staff, until quite recently and with a few exceptions, was provided with a strongly contrasted niggardliness.

In most countries it would be easier to obtain £5,000 for structure than £500 for treatment, this perhaps being due in some measure to the source whence the funds are derived.

Although some progress has been recently made, the proportion of medical officers to patients is still much smaller in this country than in America and many continental asylums.

Combined efforts are needed that this anomalous contrast between lavish expenditure in building and niggardliness in treatment may be rectified.

The training and instruction of asylum-attendants affords ample scope for progress; much has been done, but much remains to do. Dr. Campbell Clarke has published in the Journal this year some results of his efforts at instructing his attendants, who, I am assured, will be rendered more efficient by having an interest in their work. No more important curative influence could be brought to bear than by developing intelligent and zealous activity in this direction among lay asylum-officials.

I have been so strongly impressed by improvement occurring in the most unhopeful cases, as a result of the bestowal of special care, that I have almost come to regard the one as having a direct relation to the other.

Large as are the possibilities of advance in curative measures, the great field for future progress lies in the prevention of insanity.

Efforts in this direction should be recognised as a fundamental duty by every alienist physician, and the members of this Association would render important service to the community, by seizing every opportunity of diffusing information in regard to facts relating to the causation of insanity.

To render our efforts more successful, it is desirable that our knowledge on these points should be extended, and this would be very considerably aided by the adoption of a system of collective investigation.

The Statistical Tables of the Association may be considered as a collective investigation, but outside the broad

lines which they pursue are innumerable points which require examination. I would wish that two or three of these should receive special attention in each year.

Keeping in view the importance of our duties in regard to the prevention of insanity, I would suggest that the first subjects to which attention should be directed should be those relating to the genesis of insanity.

I am of opinion with reference to mental disorder that the paraphrase might be used, *nemo repente fuit insana*, with the liberal translation, that it takes more than one generation to produce a lunatic.

In the finer degrees of heredity alone exists a boundless field of enquiry. What valuable additions to our preventative knowledge would be gained, by arriving at some definite conclusion why, in a neurotic family, one member may be healthy, another neurotic only, another insane, or another phthisical. These are questions which, however difficult, I believe would yield to an extensive combined enquiry.

I will not weary you with suggestions of possible subjects for research—their number is legion, and many of a character to overtask individual powers or opportunities of observation.

I shall endeavour to make my suggestion on this point bear fruit by submitting to the Association a resolution for the appointment of a Committee for Collective Investigation, which, I trust, will obtain the earnest support of individual members.

Vague and ill-defined as our present knowledge of the genesis of mental disorders is, we may assert that these are dependent on *conditions* that are removable or avoidable, and are not the necessary concomitants of civilization, or the inevitable attendants on humanity; and that insanity may therefore be regarded as being largely preventable.

I have intimated my conviction of possible increase in curative results, and I cherish the hope that in no distant future, in spite of, even by reason of, farther advance in civilization, the present rate of development of insanity, through the combined action of preventative and curative influences, may undergo not only arrest, but diminution.

Utopian although this expectation may be, the possibility of its fulfilment should unite to more vigorous exertion in the warfare waged against the prejudices, ignorances, and errors which constitute the chief forces of our arch enemy, Disease.

The Value of Electricity in the Treatment of Insanity. By A. H. Newth, M.D., Haywards Heath.

Read at the Annual Meeting of the Medico-Psychological Association, July 23, 1884.

In the "Journal of Mental Science" for April, Dr. Alexander Robertson has referred to some observations of mine on the effects of galvanism in the treatment of insanity. These observations were made more than ten years ago. The cases chosen were not quite suitable or satisfactory; they were few in number, and the treatment was not thoroughly carried out. Still the results were far from being unsatisfactory ; in fact they alone were quite sufficient to satisfy me that electricity, if properly and perseveringly applied in suitable cases, is a powerful means of cure. I am confirmed in this opinion not only by the results of these crude experiments, and others more recently and more carefully performed, but also from the value of electricity in other neuroses to which insanity is analogous. There are few who can deny, at least reasonably deny, that such neuroses as paralysis, chorea, neuralgia, anæsthesia, &c., are benefited in a most decided manner by electricity. There are forms of insanity, as all authorities on the subject affirm, which seem, if they really are not, identical with these neuroses, and it is not at all preposterous to assert that if it does good in one form of nervous disease it must do good in the other.

The therapeutical value of electricity in mental disease is not by any means hypothetical only; it has been repeatedly proved to be of real value by numerous observers in this country, in America, and especially on the Continent. So long ago as 1804 Galvani's nephew, Aldini, is reported as having cured two cases of melancholia by galvanism to the satisfaction of several disinterested physicians who watched the cases. Even prior to this we read that Dr. Bischoff, of Jena, and Dr. Augustin, of Berlin, cured several cases of insanity with paralysis by galvanism. Some very interesting researches on the subject, extending over fourteen years, have been published by M. Teilleux,* M. Awzouy, formerly physician to the Asylum of Maréville, Cæsar Lombroso, of Leipzig, Remak, Benedict, and other well-known Continental

* "De l'Application de l'Electricity au Traitement d'Alienation Mentale."—"Annales Medico-Psychologique," 1859.

physicians, have all recorded their belief in this remedy. In England we have Dr. Radcliffe, Dr. Clifford Allbutt, Dr. Duckworth Williams, and last, but not least, Dr. Althaus,* writing also in favour of it.

We are, however, I believe, indebted to Dr. Arndt, of Greifswald,† for the most complete record of the use of electricity in insanity, and his remarks deserve attentive study, for his experience met with such marked success that he looks upon this remedy as simply invaluable in insanity. He believes that the reason why alienists have not been so successful hitherto with this agent is because their selection of cases has not been sufficiently critical, and the applications have been so unsystematic. This is no doubt very true; and when we read in the report of a case that "galvanism has been tried but was of no benefit," it is probable that this means very little more than that it was not properly applied. I believe that if these cases of apparent failure were inquired thoroughly into, some cause would in nearly every case be found for the want of success, and that under systematic skilled galvanic treatment the same cases in which it seemed to have failed would have been relieved, if not cured by it. It may seem that, in saying this, I am making a very strong assertion; but when we consider how few there are who have much more than a very vague idea of the effects of electricity, the nature of the current, the proper mode of application, and the cases for which it is suitable, we cannot be surprised at there being so many failures. Dr. Althaus very truly remarks, "even by a careless employment of galvanism a few accidental successes have been obtained; but in ninety-nine cases out of a hundred, empirical galvanists, being unacquainted with the physiological effects of electricity, have been disappointed, and have brought the remedy into undeserved contempt."

These remarks refer to the use of electricity in disease generally and not to its use in brain disease specially.

It is not, however, necessary, though it might be advantageous, that medical men who intend applying electricity in the treatment of disease should be *thoroughly* versed in the science of galvanism and its physiological effects. There are a few simple rules which may be followed, even by those who do not profess any acquaintance with the subject, with some

* See review of mine in "Journal of Mental Science," Vol. xx., p. 99.

† "Die Electricität in der Psychiatrie."—"Archiv für Psychiatrie und Nervenkrankheiten," Vol. ii., p. 271.

amount of success. It will not be unimportant if we consider some of the causes that tend to failure, and a few important points to be noticed in order to obtain any benefit from electricity.

The first consideration is the choice of a battery, and this is one requiring great care and judgment. There are so many apparatus in the market which differ in their value considerably. Some are perfectly useless, others do more harm than good; some work all right for a time, and then fail to act; others apparently increase in power after a brief use; whilst others again are intermittent in their action. Now it stands to reason that an instrument with any one of these defects would be perfectly useless, and therefore we must seek one that shall be uniform in its action. But it is also necessary that the battery shall be portable, easily set in action, and not easily put out of order, powerful and reliable in its action and economical. In this age of electric bells and electric light it ought not to be difficult to get an apparatus fulfilling all these requirements; but I very much doubt if there is one that really does so satisfactorily. I have used Stohrer's battery, which is cheap, easily put in action, and works very well for a time; but the connections soon corrode, the zincs get fouled, the carbons blocked up, and the entire apparatus requires to be constantly attended to in order that it should work properly. Perhaps the Leclanché battery that Dr. Robertson used may be more reliable; there is also one called Spamer's, which appears to be a promising and useful affair, and another suggested by Dr. Max Taube, which seems very complete and convenient.

The best plan, of course, would be to obtain the advice of a thoroughly experienced electrician as to the choice of a proper apparatus. And as the batteries are so liable to get out of order and require constant attention, it would, I think, be well to make arrangements with an experienced person to see to the apparatus frequently and keep it in proper order. No doubt the post-office authorities would allow the men who attend to their batteries to do this at a mere nominal rate. It might be a very great advantage, if it is possible, and it is certainly feasible, to obtain a vessel of some sort containing a large supply of electricity, which could be given off slowly as required, and which could be sent to be recharged when it is exhausted.

I have found an electro-magnetic apparatus answer admirably in many cases; it is very portable, is always ready

for use, and will keep in order for years. It is, however, by no means suitable for every case.

This leads me to remark that, before deciding on a battery, it is necessary to determine what *form* of electricity is to be used. Of course no one now-a-days would think of using frictional electricity, so we are limited in our choice to the various forms of galvanism or the continuous current, to electro-magnetism or Faradism, and to magneto-electricity. The physiological and therapeutical effects of these differ *inter alia* considerably; but these effects are not thoroughly understood as yet. We know, however, that a continuous current passing from the nerve-centre towards the periphery is a powerful *sedative;* that an intermittent current, an induced current, or an electro-magnetic current, is powerfully stimulating. But the continuous current has also, what has been called, a *catalytic* effect—that is, it has the power, in some unknown way, of removing a morbid condition of the tissues caused by defective circulation or by effusions, probably by stimulating the tissues to an endosmotic action. It is also *electrolytic*, but it is very doubtful if this effect could be utilized in diseases of the brain, however desirable it might be to do so, if it were possible.

The continuous current in its effects is also *anti-spasmodic, anti-paralytic, restorative, stimulative* and *tonic*, according to the mode of application. It is therefore most essential for success that the necessary effect that is suitable for each particular case should be carefully considered. It has been pretty well determined experimentally, and by the researches of Pflüger, Cyon and others, that a state called *anelectrotonus*, or depressed nerve-action, is produced at that part of the nervous system which is connected with the negative pole of the battery (the anode), and an increased excitability in the neighbourhood of the positive pole (or cathode). The former state has been called *anelectrotonus*, and the latter *catelectrotonus.* In excited states of the nervous system it is evident we must obtain the former effect, and in depressed states the latter.

There is, therefore, another very important point to be considered, namely, the *direction* of the current. Properly speaking, there are two currents, one passing from the anode (negative) to the cathode (positive), the other from the cathode to the anode; but the latter, being a feeble and unimportant current, is generally disregarded, and the former is the one that is spoken of as "the galvanic current."

A battery that has been some time in use, without proper attention, becomes over-polarised, and other currents are formed, or the chief current may pass in the reverse direction. This may also happen from some faulty construction, or arrangement of the elements, conductors or connections. These errors may account for many failures in the use of the electric battery. They also suggest the extreme importance of having a good galvanometer attached to the apparatus, in order to show the force and direction of the current.

As to the mode of application, I think, as a rule, it will be found best to apply one electrode to the back of the neck, about the second or third cervical vertebra, and the other electrode to some distant part of the body, as the hand, the foot, the lower part of the spine, the region of the liver, kidneys, &c. I do not think it advisable to apply both electrodes to the head at the same time, for unless we wish to obtain a powerful stimulant effect, or electrolysis, or some such effect, it is questionable what good it can do in this way. It may, however, be useful in order to cause absorption of some tumour (or effusion) on the brain by catalysis; but it is probable that the same result would be obtained by one pole only.

In certain cases it is better to apply electricity mediately—that is, for the operator to hold one of the electrodes and the patient the other; then the operator places his hand on the part he wishes to be affected. In this way the current first passes through the operator, who can judge the power of the electricity by the effects on himself.

There is an advantage, which frequently may be of extreme value, in placing one electrode at or near the nervous centre, and the other at some distant part, and that is, that by this means we obtain a more diffused effect, and can also act upon some important diseased organ. Insanity is often due to, or is complicated by, disease of the liver, spleen, kidneys, &c., and by directing the electric current to these organs they may be benefited. It is a well-known circumstance that the skins of lunatics are often impaired in their functions; electricity, and especially magneto-faradism, has a powerful effect in restoring the function of the skin, accelerating the pulse, and rousing the activity of the whole nervous system. The nerve-power of the brain may in this way be acted on through the skin, and restored to health. The late M. Awzouy, already mentioned, has very strongly advocated this method

of treating insanity, which he proved to be successful in many cases.

Probably the safest way to use the electric battery is to apply the negative pole (anode) to the head or back of the neck, and the other to some distant part. In this way we get a sedative tonic effect produced on the brain, if we employ a steady, continuous current; if we use the electro-magnetic current we get a stimulant tonic effect.

In conclusion, I would most strongly urge those who have the care of the insane to give the electric battery a fair trial for a lengthened period, with careful attention as to the choice of cases and the galvanic effects. I feel confident that if a *proper battery is correctly applied to suitable cases* great benefit will be experienced from it. But it cannot be too strongly urged on the notice of all who wish to employ this remedy that galvanism is not a remedy to be used indiscriminately, or in a haphazard way. It is not a toy, but a very potent means of doing good or harm, and must be used very cautiously and scientifically. Though we fear there are few who can claim to be really scientific galvanists, or who follow scientific principles, still there are many who can use electricity with tolerable success if reasonable precautions are taken, and some amount of common sense is observed, in the choice of cases and mode of application.

On Pathological Research in Asylums for the Insane. By James Adam, M.D., Malling Place, Kent.

According to the latest returns, published by the Commissioners in Lunacy in their Blue Book for 1883, sixty-seven thousand four hundred and eighteen patients were registered as under treatment in the various asylums of England and Wales, and as being under private care during the previous year.

Of that number, four thousand seven hundred and eighty-five died, a proportion of deaths (per cent.) to the total number under treatment of 7·61—or, calculated upon the daily average number resident, of 9·11.

On consideration of these figures, the question naturally arises, is practical pathological and generally scientific use made, to the fullest available extent, of this vast field for study and research?

As might be expected from the fact that fifty-five thousand

one hundred and three patients out of the total number above given were under treatment in county and borough asylums, by far the larger proportion of deaths occurred in these institutions, namely, four thousand one hundred and thirty-two; and it is to them, therefore, that we must principally turn attention for replies to these questions.

The deaths in registered hospitals for the insane during the same period numbered one hundred and seven; in metropolitan licensed houses, two hundred and forty-seven; in provincial licensed houses, one hundred and ninety-six; in naval and military hospitals, sixteen; in criminal asylums, eighteen; in idiot-establishments, forty-eight; whilst the considerable number of twenty-one patients are reported as having died while under private care as single patients.

In many, probably most, of these institutions, opportunity also occurs for examining the bodies of patients after death, and to them we must also look for answers to the questions in a proportionate degree.

There are at present no data readily available for ascertaining in what proportion of the deaths occurring during the year 1882 post-mortem examinations were made. Some four or five years ago official returns showed that out of the total number of deaths taking place in asylums, no less a proportion than 65 per cent. of the bodies were examined by the asylum medical officers.

In 1882, however, the following report is made by the Lunacy Commissioners, showing a great falling off in this respect :—

The mortality of the year, calculated on the average daily number resident, was 12·16 per cent. for the males and 7·57 for the females, or 9·64 for both sexes.

These ratios differ but slightly from those of last year, and upon the whole must be considered favourable. The ratios of recoveries and deaths are given in appendix (B) for each particular asylum, where are shown also the total deaths and the number of post-mortem examinations made in the several establishments.

We found it necessary in our last report to remark that a great falling off was to be noticed in the practice of making these very necessary examinations, and the attention of medical superintendents was specially drawn to the fact.

We are now glad to be able to report a great improvement in this respect as regards the returns for 1881. Of the total four thousand seven hundred and fifteen deaths which occurred last year, two thousand seven hundred and eighty-nine were the subjects of post-mortem examination.

The proportion of these autopsies to the total deaths in county and borough and State asylums for the year 1880 was 37 per cent., but in 1881 it had risen to 59 per cent.

In many asylums we are glad to observe that this ratio is greatly exceeded, though elsewhere comparatively few examinations are still made. Their value, from a pathological point of view, and as a means of detecting injuries which may have escaped notice during life, is now generally admitted ; and we hope to find the example, so well set in some asylums, followed universally.

As a rule, permission to make post-mortem examinations on the bodies of patients dying in asylums does not appear to be difficult to obtain, but to have power to do so within a reasonable period after death (which is often all important when brain-appearances are concerned) is rendered more certain by the observance of a practice which now prevails in many asylums, that of giving a printed notice to the friends on the admission of a patient, that in the event of death occurring the body will be examined unless a written objection is made by them at the time. The same result is, it is believed, also obtained in some other asylums by a permanent Coroner's order to the effect that an examination should be made in every case before the cause of death is certified to him.

But as there are no rules without exceptions, so difficulties and opposition have been, and may be again, encountered in some instances by asylum-superintendents, it may be from unexpected sources, whilst endeavouring to obtain sanction ; and it is understood that even at the present time medical superintendents of some of the Colonial asylums are forbidden by their governing bodies to make autopsies.

It would be well also if the existing state of the law were more clearly defined and made known than it seems to be at present with regard to cases where post-mortem examination is made without sanction of friends, and where no Coroner's order has been issued.

A case which may give rise to a decision on this point has occurred recently, in which a surgeon of one of the Dublin Hospitals has been threatened with an action for thus acting, regarding which the "Medical Press and Circular" has the following remarks :—

As a question of law, it is more than doubtful whether any action lies for the making of a post-mortem examination, because we believe no one has a right of property in a cadaver, and no money claim can be made for injured feelings.

A few years ago it was resolved by some having an especial interest in mental pathology to take steps to ascertain the opinions and feelings generally entertained with regard to the pursuance of its study practically by medical superintendents.

As the opinions thus elicited were almost unanimous, very important, and very exhaustive, it may be useful to recapitulate some of them here. With no uncertain voice it was stated that not only was it desirable, but that it was absolutely necessary, that post-mortem examinations should be prosecuted with vigour, and to the fullest possible extent, in asylums. Some superintendents stated that their asylum-rules made the practice compulsory on the part of the medical officers, and those rules had received the sanction of the Home Secretary; others drew very forcible comparisons between the special importance of making post-mortem examination on the bodies of patients dying in asylums and those dying in any other kind of hospital or institution.

The various opinions and reasons given may be shortly summarized and enumerated thus :—

1st.—Bodily disorders, injuries or diseases, even of an extensive character, may be so obscured and masked in the insane by the mental symptoms that they cannot be detected during life.

2nd.—The practice of making post-mortem examinations in asylums deters attendants and others from ill-using patients, as injuries inflicted by them are certain to be detected, and it thus proves a safeguard and protection to patients.

3rd.—It protects good attendants of asylums against groundless charges, not unfrequently made, of ill-using patients.

4th.—The true cause of death is frequently difficult to arrive at without a post-mortem examination, a difficulty increased according to the numbers under treatment for the reasons firstly mentioned, and thus are rendered necessary reports to coroners, and consequent inquests.

5th.—Mortality-tables, showing causes of death, are not accurate or reliable as scientific records without it.

6th.—For the following general reasons: To increase knowledge of the special disease treated by the physician himself, and for the good of others; a very eminent authority remarks that, were it not for such work, scientific

medicine would become extinct; to verify diagnosis of disease; to settle without doubt the cause of death; to clear up obscure symptoms; to prevent on the part of the medical staff a slip-shod method of physical examination of the living body; to yield increased interest in cases under care, to complete the history of the case in the case-book; to prevent the scientific spirit being killed by routine asylum-work.

7th.—For the education of the medical staff of an institution, especially its junior members. The latter enter on this branch of the profession with a view of perfecting their knowledge of diseases of the nervous centres, and to fit them for the higher positions in the treatment of mental disease; and the best men of the various universities and colleges would certainly be deterred from joining the medical staff of an institution which debarred them from the usual privileges in this respect.

Having recapitulated the very many excellent reasons given by practical men for the performance of post-mortem work in asylums, the question remains to be considered: Is advantage taken, to the fullest possible extent, of the extensive field for pathological research formerly alluded to, not only as affording practice, information, and the means of reference to individual members of the medical staff of any particular asylum or hospital, but for the information of the whole specialty and the general body of the profession as well?

The facts quoted from official returns, showing the extent to which practical pathology is already prosecuted in many asylums, taken in connection with the valuable results to be found recorded in the various case or post-mortem books of asylums, are perhaps sufficient answer to one portion of the question; but with regard to the second portion, probably it would not be possible to give quite so satisfactory a reply, for the record once made in case or post-mortem book, except in comparatively rare instances, does not further see the light.

Looking to the important additions which might be made to our more intimate knowledge of mental pathology, and the deductions which might be drawn from the comparison of morbid appearances in a large number of cases presenting essentially the same mental and physical characteristics during life, it seems worthy of consideration whether some means might not be adopted for facilitating such compari-

sons, as, for instance, by giving in a tabular or other convenient form the collective results obtained in each asylum.

To some extent, an attempt has been made in this direction already, for a few asylum-superintendents publish in their annual report a brief outline of each case examined. This would not, however, appear to be, even if carried out more extensively than it is at present, a convenient form for reference to collective results.

On the whole, the tabular seems to offer the best, easiest, and most convenient form for reference; but the formidable difficulty presents itself of reducing to this form the immense number of morbid appearances which come to be recorded in the complicated and numerous component parts of the nervous centres.

Notwithstanding this difficulty, an attempt, although necessarily in the first instance a very imperfect one, is here made to give an outline of the form such tables might be made to assume. (See pp 366 and 367). Imperfect as it is in its present state, it may serve as a basis to begin upon, and experience and practical working may probably lead to much simplification of the more important details in course of time.

Should some such tabular form meet with general acceptance, the asylum-report would seem to offer the natural and most ready means for giving the necessary publicity for the information of the profession at large, and more directly to those specially interested, the value of the asylum-report would be materially enhanced thereby, and it would probably add to the interest in, and prove not the least important of, the many excellent tables already appearing.

Of course, where such a delicate matter as brain appearance is concerned, the opinion of different observers may differ widely, and much would depend upon the operator's skill, powers of observation, and previous instruction; but the general result could hardly prove otherwise than valuable, and comparison of views obtained in this manner would, in course of time, tend more than anything else to correct previous errors, and to induce accurate methods of observation and recording.

Since the foregoing was written, questions have more than once been asked in the House of Commons on the subject of the disposal of the dead in asylums.

On March 25th Mr. Healy asked the Chief Secretary for Ireland whether it was a fact that subjects for dissection

were supplied to the Queen's College, Cork, from the Cork District Lunatic Asylum, and, if so, whether it had been done with the sanction of the Board of Governors; and, if such were the case, what was the total number supplied during the college sessions 1881-2 and 1882-3, and the average expense of each.

Mr. Trevelyan replied—The hon. member is no doubt aware that the difficult subject of the supply of anatomical subjects for the purpose of schools of anatomy is strictly regulated by statute, and that inspectors of anatomy are appointed to insure that the law is complied with. The rules for the management of district lunatic asylums require that, on the death of a patient, immediate notice should be given to the relatives of the deceased, in order that the body may be removed for interment. In the case of unclaimed bodies only the Governors have authority to authorize anatomical examinations if they see fit. In all cases, remains are subsequently removed for interment in consecrated ground, as required by the statute, and certificates to that effect forwarded by the inspector of anatomy. I have satisfied myself that the law is fully complied with at Cork; but the subject is one with regard to which the law, while requiring for the protection of the public that particulars shall be regularly laid before Government, does not require the publication of details, and I do not think details should be given in Parliament. I trust the hon. member will not press his inquiries.

Mr. Healy asked whether he was right in understanding that the right hon. gentleman declined to say whether the bodies of these unfortunate deceased Irish lunatics were given over for dissection. He presumed that the right hon. gentleman considered such a practice scandalous.

Mr. A. O'Connor wished to know whether the Cork District Lunatic Asylum received any money consideration for the bodies.

No answer was given to the question.

On the 1st of April, Mr. Healy having returned to the question of the Cork District Lunatic Asylum,

Mr. Trevelyan replied—The inspector of anatomy for Munster is allowed to reside in Dublin. He is required to keep an office in Cork, and the arrangement is open to review should inconvenience arise. The other three provinces of Ireland are under one inspector, who also resides in Dublin. Before the arrangement as to the Munster in-

Table No. I.—Post Mortem Examination. Naked Eye Appearances.

Number of Case.	Form of Mental Disorder.	Mode of Death.	Scalp.	Cranium.	Dura Mater.	Arachnoid.	Pia Mater.	Convolutions.	Lateral Ventricles.	Fifth Ventricle.	Choroid Plexus.	Third Ventricle.	Pineal Gland.	Optic Thalamus.	Corpus Striatum.	Corpora Quadri Gemina.	Grey Matter.	White Matter.	Fourth Ventricle.	Pons Varolii	Medula Oblongata.	Cerebellum.	General Summary and opinion of appearances.
*1	M 1		L. 1	T. 1	A. 2	A. 5	H. 2	A. 3	E. 2		C. 3						C. 5	P. 2					
2																							
3																							
4																							
5																							
6																							

A list of the more common post-mortem appearances (which may be added to (indefinitely) with corresponding letters and numbers, to be inserted in the columns as above, under their respective headings, instead of the names.

Corresponding number.	A.	No.	B.	No.	C.	No.	D.	No.	E.	No.	F.
1	Anæmia.	1	Blood Vessels (diseases)	1	Congestion.	1	Density Increased.	1	Exostosis.	1	Fracture.
2	Adhesion.	2	Arteries Atheroma.	2	Condensation.	2	Ditto Diminished.	2	Effusion Serous.		
3	Atrophy.	3	Bruises.	3	Cysts.	3	Death by Coma.	3	Ditto Hæmorrhagic.		
4	Œdema.			4	Colour Changed.	4	,, Hæmorrhage.	4	Extravasation.		
5	Sub. Arach. fluid increased.			5	Ditto Darker.	5	,, Syncope.	5	Exudation.		
				6	Ditto Lighter.	6	Dementia.				
	G.		H.		I.		K.		L.		M.
1	General Paralysis.	1	Hæmatoma Auris.	1	Indentations Special.			1	Loose on Cranium.	1	Mania.
		2	Hyperæmia.	2	Incrustation.					2	Melancholia.
		3	Hæmorrhage.	3	Infiltration.					3	Marasmus.
		4	Hypertrophy.	4	Inflammation.						
				5	Idiocy.						
				6	Imbecility.						
	N.		O.		P.		Q.		R.		S.
1	Necrosis.	1	Osseous changes.	1	Pachionii enlarged.					1	Sulci Widened.
2	Nerve tumour.	2	,, Caries.	2	Puncta Vasculosa numerous.					2	Softening.
3	Nerve roots, diseased condition.	3	Opacity.	3	Ditto ditto few.					3	Surface Lesions.
	T.		W.		V.		W.		X.		Y.
1	Thickness increased.			1	Vascularity increased.	1	Wounds.				
2	Ditto diminished.			2	Ditto diminished.						
3	Tumour.			3	Venous Sinuses, in-						

No. of Case.	Form of Mental Disorder	Mode of Death.	Dura Mater.	Arachnoid.	Pia Mater.	Epithilium.	Blood Vessels.	Neuroglia.	Cells.	Nerve Fibres.	Grey Matter.	White Matter.	Choroid Plexus.	Optic Thalamus.	Corpus Striatum.	Corpora Quadri Gemina	Pons Varolli.	Medulla Oblongata.	Cerebellum.	General Summary and opinion of appearances.
1																				
2																				
3																				
4																				
5																				
6																				

A list of the more common microscopical appearances (which may be added to indefinitely) with corresponding letters and numbers to be inserted in the column as above, under their respective headings, instead of the names.

No.	A.	No.	B.	No.	C.	No.	D.	No.	E.	No.	F.
1 2 3 4 5	Arachnoid Milky. Ditto Granulations. Ditto Hyperæmia. Aneurisms Microscopic. Apoplexies ditto.	1	Brain dilated round vessels.	1 2 3 4 5	Colloid degeneration. {Cells. Pigmentary degn. / ,, Granular ,, / ,, or Fuscous ,,} ,, Calcification. ,, Hypertrophy. ,, Atrophy.	1 2 3	Deposits, Crystalline. Degeneration, Granular of Cells. Disintegration of Nerve Cells.	1 2	Epithelium changed. ,, proliferation.	1 2	Fibres thickened. Fatty degeneration of Vessels.
No.	G.	No.	H.	No.	I.	No.	K.	No.	L.	No.	M.
1 2 3 4 5 6	Ground Glass appearance. Granulations. Grey Matter, Cells absent. ,, Matter continuity of fibres destroyed. Ditto infiltration of Lymph. Ditto Yellow softening.							1	Lymph Exudations.		
No.	N.	No.	O.	No.	P.	No.	Q.	No.	R.	No.	S.
1 2 3 4	Neuroglia Atrophy. ,, Hypertrophy. ,, Nuclei increased. ,, Nuclei Atrophied.			1 2 3	Pia Mater, thickening. ,, hyaline fibroid membrane. Pigmentation of Arterioles.						Sclerosis general. Ditto disseminated. Ditto Miliary.
No.	T.	No.	U.	No.	V.	No.	W.	No.	X.	No.	Y.
1 2	Thickening. Transformation Vitreous.			1 2 3 4 5 6 7	Vessels dilatation. ,, tortuosity. ,, hypertrophy. ,, deposits around. ,, degeneration of coats. ,, proliferation of nuclei. ,, plugging.	1	White Matter Patches.				

spector was sanctioned, it was ascertained that there is but one inspector for all Scotland, and there are two for England, both of whom reside in London. It is therefore clear that in no part of the country is continuous residence on the spot considered necessary for the discharge of the duties of these officers. I stated, in reply to a former question, all that I feel called upon to say with regard to the powers and duties of the governors of lunatic asylums in this matter. I pointed out that the law does not require the publication of details as to dissections, and in the interests of humanity and of medical science any attempt to force publicity is greatly to be deprecated. With regard to the last paragraph of the question, I think it must be perfectly clear to anyone that no school of anatomy could be carried on without incidental expenses, and I am sure that there is no such school in the country which students can attend without paying fees. If any of the students at Cork think that any improper charge is made in their case they should address the college authorities. I am informed that nearly 150 students of Queen's College, Cork, presented an address to the Professor of Anatomy on Friday last stating that they had heard with regret that action had been taken to make the class regulations in anatomy and physiology the subject of questions in Parliament, and so tend to create an erroneous impression in the public mind regarding the relations subsisting between the professor and students in these departments. These relations, they say, have always been of the most cordial character, and any representation of them as otherwise must incur their unqualified repudiation. I am informed by high medical authority in Dublin that if these questions are continued a feeling may be aroused among ignorant people which would render it impossible to carry on anatomical studies at Cork, and perhaps in any other part of Ireland.

"The Thirty-eighth Report of the Commissioners in Lunacy," just issued, contains the following remarks:—

The percentage of post-mortem examinations to the deaths (nearly 69 per cent.) is higher than we have hitherto been able to report, and reflects, we consider, great credit on the Medical Superintendents of asylums as a body; though, indeed, the average would have been considerably improved had more examinations been made in certain asylums. Thus at Littlemore (Oxford, &c.) Asylum, there were but 13 examinations to 42 deaths, a per centage of 30·95 only. At Stafford the per centage was 33·06 (40 examinations in 121 deaths). At

the Hull Borough Asylum the proportion was the smallest, but we have little doubt that at the new asylum it will be possible to hold more examinations.

On the other hand, it is worthy of remark, that at the Kent Asylum at Barming Heath, there was a post-mortem examination after each of the 129 deaths, and this was also the case at the Leicester Borough Asylum, though of course the deaths were much fewer, being only 37.

A reference to the column in Appendix (B^1) will show that in several asylums there were nearly as many examinations as deaths.

The Data of Alienism. By CHARLES MERCIER, M.B.

(*Continued from page* 16.)

Following the estimation of the state of the blood comes naturally that of the state of the circulation; and for the purpose of the alienist the efficiency with which the peripheral circulation is carried on is the main thing to be determined. From his point of view it is of far less importance to discover an insufficiency of the mitral valve than to find a cold blue flabby hand or nose; for a damaged valve is consistent with an efficient supply of blood to the highest nervous centres; but if one part of the peripheral circulation is seen to be badly carried on, the inference is unavoidable that the circulation in other peripheral regions is similarly defective. The direct evidence of the condition of the cerebral circulation obtainable by the ophthalmoscope should not be neglected. Although the "heat of the head" is a matter of prime importance among the laity, and is commonly considered by physicians as of some value, yet, having regard to the fact that the whole of the face and scalp are supplied by branches of the external carotid artery, while the encephalon receives its blood mainly from the internal carotid, I was for some time doubtful whether much stress should be laid on this external temperature. I have, however, seen a case in which not only did the head sweat freely, but steam rose visibly for many consecutive hours from the scalp of a woman lying in a well-warmed ward, and without any fluid or medicament being applied to the head. In that case there was found after death the most excessive congestion of the whole cerebral substance.

The Respiratory Function.—Perhaps the most important and useful piece of advice that could be given to a person entering on the care of the insane would be: "*Always suspect that your patient has pneumonia.*" Probably more than one-half of the mortality of dements is due to this disease, which very often is extremely insidious in its onset, attended by few and slight symptoms, and by ill-marked physical signs. An old woman is noticed to be more feeble than usual; she totters as she walks; she declines her food. But she makes no complaint, suffers no pain, coughs so little that it has not been noticed; her pulse is quiet, her tongue clean, her temperature little or not at all raised. On close observation you notice that she breathes a little more rapidly than usual, and her respiration is shallow, but there is nothing very marked—nothing to make you suspect grave disease. Yet when you examine the chest you find the base of one lung completely consolidated. Such is the history of scores of cases. Again, of whole classes of idiots, almost every individual dies of tuberculosis. The connection, too, of phthisis with some forms of non-congenital insanity is established. Occasionally the lung-disease and the insanity appear together. More rarely the activity of the one disorder alternates with that of the other. The tendency towards phthisis is always a factor of especial gravity in a case of insanity. Hence the alienist should be constantly on the watch, in the young for phthisis, and in the old for pneumonia.

The estimation of the renal function is important to the alienist not only because the accumulation of waste-products in the blood, which failure of this function permits, may directly produce alienation; and not only because of the close connection between renal disease and gout, which is another direct cause of such disorder—but because the condition of the renal function in middle life is an index, if not to the amount of, at least to the tendency towards, fibroid degeneration, not only in the kidneys, but in all the tissues throughout the body. If, in a person who has recently and gradually become insane, we find urine of low specific gravity, albumenuria, uræmic retinitis, and the hypertrophied heart and square-headed pulse, earthy complexion, and dry skin that accompany granular kidney, we have obtained not only a fairly complete statement of the bodily health, but also a most important insight into the

probable nature of the change in the highest nervous centres which underlies the insanity. Knowing the progressive nature of this change, we are able to found upon the datum thus gained a definite and confident prognosis, which will be at least as unfavourable as to the insanity as it is to the bodily health. The copious flow of urine that accompanies or follows some forms of mental perturbation, although it takes place through the kidneys, is more an indication of altered vascular pressure than of altered renal function, and no definite alteration of the renal secretion has yet been observed to be associated with more prolonged disturbances of the superior nervous processes.

Digestion and its Accessories.—The connection of the digestive function with the function of the highest nervous centres is most intimate and most obscure. That the normal working of the highest nervous arrangements depends on an adequate supply of nourishment, and that this again depends on the integrity of the digestive function, is the most fundamental aspect of this connection, but it is not the one with which we are most concerned. The amount of nutriment added to the blood may be miserably deficient in quantity, and inferior in quality, without any very marked deterioration of the action of the nervous centres beyond a simple diminution of activity; but the manner in which the digestive function is carried on—the condition not merely of the process of assimilation which is its outcome, but of all the contributory processes—is bound up with the mode of action of the superior nervous arrangements in an intimate correlation of which the *rationale* is extremely obscure. What are the most constant and most reliable symptoms of tubercular meningitis? Not headache, not delirium, not fever, not convulsion—not any symptom directly referable to cerebral disturbance; but constipation and a sunken belly. What is the one symptom that never fails in cerebral tumour? Again, not convulsion, not optic neuritis, not paralysis, nor aberration of mind; but vomiting—persistent, "purposeless" vomiting. Such vomiting as occurs in gross intracranial disease is not present, it is true, in any form of insanity as such, and the existence of constipation in a case of insanity is in this country, and at the present day, in no danger of being overlooked; but there are other aspects of the association between disturbance of the digestive functions and disturbance of mind which require notice. The

unutterable misery which accompanies severe nausea, such as that which occurs in sea-sickness, is well known, and the profound prostration and agony which may follow a comparatively trifling blow upon the abdomen is likewise a matter of general notoriety. In these instances a grave abdominal disturbance is accompanied by a mental disturbance of corresponding gravity, and the association between them is manifest and conspicuous. Bearing in mind the principle already adverted to, that all morbid processes are but exaggerations of the processes of health, we might well expect to find that abdominal disturbances less sudden and less severe would be accompanied by mental disturbances having the same character of depression, but showing differences of degree, of mode of onset, and of duration, corresponding with the differences of the bodily lesion. And it is so. The very names of the two chief forms of mental depression—hypochondriasis and melancholia—indicate that many centuries ago there was some dim recognition of this association between the abdominal functions and mental states, and at the present day its validity is maintained no less by the special facts of alienism than by the common experience of intelligent people. Let us look at some of the facts.

When a child is whining and fretting, its mother says that "its stomach is out of order," and gives it a purge; and her opinion and practice are commonly justified by the event. A nightmare is held to be sufficiently accounted for by an indigestible supper taken over night. The chronic dyspepsia from which Carlyle suffered is adduced in apology for his morose disposition. Dysentery and diarrhœa are the scourge of armies, but much more of defeated armies. Many thoroughly well authenticated cases are on record of jaundice following a shock of grief. When subscriptions are to be collected for a charity, the donors are first warmed into an expansive and generous mood by the administration of a good dinner. It may be said that the resulting state of mind is partly due to the direct action of the imbibed alcohol upon the nervous centres, and no doubt this is so; but still, even since the practice of total abstinence and the use of non-alcoholic drinks have become widely prevalent, the subscriptions following a public dinner often amount to thousands, while those elicited by the most successful charity sermon, which is delivered to fasting stomachs, very

rarely exceed two or three hundred pounds. The essential conditions to happiness have been cynically stated to be a good stomach and a bad heart, and, whatever our opinion may be as to the latter, there can be no doubt whatever of the indispensableness of the former.

Although it is, as a rule, very dangerous to make a sweeping assertion founded upon merely what Whewell termed the colligation of facts, yet it is probably quite safe to say that chronic melancholia is invariably accompanied by constipation, which is commonly very intractable. It is a very conspicuous feature of the malady. All writers on insanity insist upon the close association of chronic melancholia with failure of the digestive function; so much so, that the treatment *secundem artem* is directed mainly to restoration of this function, and experience shows that, as this yields to treatment, the mental condition improves. "Make a melancholy man fat," says Rhazes (A.D. 850), "and thou hast completed the cure." While, if the constipation and anorexia are insurmountable, the mental condition is hopelessly beyond cure. Leaving for a moment this aspect of the subject, let us see what is the experience of physicians with respect to chronic gastro-intestinal torpor. Dr. Fenwick speaks of the gloom and irritability that accompany chronic gastric catarrh. Niemeyer remarks on the frequency with which hypochondriasis accompanies the same malady, and says there is usually some mental depression. "I have seen," he says, "a *general* discouragement, an under-valuation of mental power, despair as to business, &c., induced by chronic gastric catarrh, and have seen these symptoms disappear on the cure of the disease. Only a few years since I treated a very wealthy man for chronic gastric and intestinal catarrh, who, during the disease, thought he was near bankruptcy, and left unfinished a building that he had begun because he thought that he had not sufficient money to continue it. After spending four weeks at Carlsbad, his old strength and feelings returned; he finished his house with great splendour, and has been well ever since." Again, he says that in chronic intestinal catarrh there is almost always great mental disturbance. "The patients either occupy themselves entirely with their physical state, and have no brains or time for anything else, or they are subject to a total indifference or despair." Dr. Allchin, speaking of the same disorder, says that "there

would seem to be a special inclination for the mental qualities to become affected, so that the intellect may become dulled and sluggish, the temper irritable, and the patient may fall into a condition of marked hypochondriasis." Now what is the manifest and unavoidable inference from this remarkable consensus of observation from two such different sets of sources? Alienists find that chronic mental depression is invariably associated with chronic gastro-intestinal torpor. Physicians find that with chronic gastro-intestinal torpor there is almost always mental depression. Is not the inference inevitable and unimpeachable that *chronic melancholia and chronic gastro-intestinal torpor are different aspects of the same malady?* I do not say—and I protest strenuously against the view—that either of them is the cause of the other. The position taken is that they are the obverse and reverse sides respectively of the same bodily condition. When there is feebleness and want of momentum in the currents of energy emitted from the grey matter of the highest nerve centres, this defect has a subjective accompaniment in mental depression, and issues objectively in that general lethargic inactivity that characterises conduct in melancholia; when the same deficiency of action occurs in the nerve centres that set going the intestinal movements, it results in constipation and its attendant deficiencies of function. Those cases in which the superior nerve centres are most deficient, or most conspicuously deficient in the amount and grade of activity, come under the care of the alienist, and are called melancholia; while those in which the deficiency of the lower centres is the most prominent feature come under the care of the physician, and are termed chronic intestinal catarrh or chronic constipation; but the fundamental nature of the malady is the same in both. The same tissue—the grey matter—is at fault, and the fault is of the same nature in both; but in one the main weight of the defect lies on one region of the grey matter, and in the other on another. A similar view enables us to connect together the obstinate constipation of old age with the general subsidence of bodily activity, and with the mental decline that occurs in advancing life, and to assimilate this whole group of changes to that of melancholia.

The skin is developed from the same layer of the blastoderm as the superior nerve centres, and the two structures remind us of their community of origin by the simultaneous

variations that they frequently undergo. The skin, and its modifications, the special sense organs, are, moreover, the medium through which all influences from the environment must pass in order to affect the organism, while in the superior nerve centres all such impressions are ultimately registered; and in this close biological relationship is indicated another explanation of their concomitant variations. Whatever its *rationale*, this correlation between the variations of outer and inner structures renders that member of the couple, which alone is open to direct observation, of especial interest and importance, since from its changes we can often safely infer the quantity, if we cannot judge of the nature or direction of the changes that are occurring in the other—just as from the verdure of a landscape we can judge of the amount of activity that is going on in the roots underground, though we may not be able to estimate its nature.

Instances of this relationship are abundantly numerous. White horses have from time immemorial been considered less vigorous and enduring than coloured ones. Albino animals of every kind are much feebler and less active than those possessing a normal amount of pigment in the skin. Many drugs which have a special action on the nervous system have a special action on the skin also. Bromide of potassium produces a pustular eruption. Arsenic has a powerful remedial effect on certain skin diseases. Silver given internally for epilepsy produces staining of the skin. Opium checks all secretions save that of the skin, which it promotes. Belladonna gives rise at once to delirium and a scarlet rash.

The temporary alterations in the skin that accompany transient changes of feeling are among the tritest of facts. The flushing of shame and of rage, the pallor and sweating of fear, the bristling of the hair in horror, are our commonest experiences of the connection under consideration; but with these we are not now directly concerned. What we are interested to know is whether changes of mind more profound or more enduring are accompanied by changes in the skin of corresponding magnitude and duration. If we accept the existence of physiological laws—if we believe that variations of bodily function necessarily result from antecedents, and neither appear in the absence of these antecedents, nor fail to follow their occurrence—we may be

certain beforehand that such correspondences do occur, and the evidence of their existence is neither dubious nor far to seek. Dr. Hack Tuke speaks of the harsh, or moist and clammy skin of melancholia, and states that in mania it occasionally emits a marked and diagnostic odour. Further, he says: "I have known alternations in the colour of the hair corresponding to alternations of sanity and insanity." Dr. Crichton Browne says that in some cases of insanity the state of the hair is a sure and convenient criterion of the mental condition. Dr. Bucknill states that in a great many cases of chronic mania the hair becomes harsh and bristling, and the skin of the scalp becomes loose. I am acquainted with a patient who, after an attack of mania, shed the nails of several fingers and toes. The frequency with which dements pick sores in their skin is worthy of remark here—urged to do so, no doubt, by some sensation referred to the part. But instances of slow and enduring alterations of skin accompanying slow and enduring alteration of the highest nervous centres—although a very wide consensus of opinion testifies to the frequency and definiteness of their occurrence—are by their very nature too inconspicuous to compel conviction on the part of those indisposed to believe or to attach importance to them. Fortunately there is another class of instances in which a rapid and conspicuous alteration of the skin has followed so closely upon a violent disturbance of the superior nervous system that no doubt can be entertained of the connection between them. Of such instances the blanching of the hair that accompanies or follows depressing emotions is one of the most striking. The following account by Staff-Surgeon D. P. Parry is probably the best authenticated case on record:—"On Feb. 19th, 1858, a prisoner in the S. of Oude was brought before the authorities for examination. Divested of his uniform, and stripped completely naked, he was surrounded by soldiers, and then first apparently became alive to the dangers of his position. He trembled violently, intense horror and despair were depicted on his countenance, and, although he answered the questions addressed to him, he seemed almost stupified with fear; while actually under observation, within the space of half-an-hour, his hair became grey on every portion of his head, it having been, when first seen by us, the glossy jet black of the Bengalee aged about 24. The attention of the bystanders was first attracted by the sergeant, whose prisoner he was, exclaiming,

'He is turning grey,' and I, with several persons, watched the process. Gradually but decidedly the change went on, and a uniform greyish colour was completed within the period named." Analogous cases present instances of the connection here illustrated in an equally unmistakable manner. Le Cat quotes from the "Journal Encyclopédique" the case of a man who had, after being very angry, an apoplectic attack, which ended in paralysis of the right side, and at the same time this side of the body became completely yellow, not excepting the right half of the nose. During the first French Revolution a woman was condemned to death by a Parisian mob, and the lantern (the instrument of execution) was actually let down at her feet. She was reprieved, however. Shortly after her colour began to change, and in a few days she became as dark as a moderately dark negro. She died in 1819, aged 75, more than 30 years after, her skin remaining dark until death. Laycock relates the case of a young lady, aged 16, who met a man in the dark, who insulted and greatly terrified her. In the morning her eyelids were yellow. The colour gradually extended over her face for eight days, until it was covered. Then the yellow deepened into black. Eight days after the arms began to turn yellow, and became slowly black. The colour remained for four months, at the end of which time she rapidly recovered. I have recently published in "Brain" the case of a woman whose skin always presented a conspicuous change of hue at the onset of her attacks of epilepsy, and resumed its normal colour on the termination of the attack.

Such occurrences as these show indisputably that between changes in the skin and changes in the superior nerve centres there is an intimate correlation; and these conspicuous instances are, we may be certain, only exaggerations of similar but smaller changes that accompany feelings of less intensity—changes whose recognition and measurement await the extension of our powers of observation.

Clinical Observations on the Blood of the Insane. By S. Rutherford Macphail, M.D. Edin., Assist. Med. Supt., Garlands Asylum, Carlisle; being the Essay to which the prize of £10 10s., together with the bronze medal of the Association, was awarded in 1884.

The older writers on Insanity including Pinel, and Esquirol, believed that functional disturbances of the higher nervous centres were the chief factors in producing mental disease. Whether this is the case or not, and whether functional disease of the brain may exist without appreciable change of structure, there can be no question that the quantity and quality of the blood circulating through the higher nervous centres affect their functions in an important manner.

First as to quantity. According to Bucknill and Tuke* the effect of blood on the brain, when in excess, is that of lethargy, while a diminution of its quantity is productive of syncope and unconsciousness. Both these conditions, described as congestion and anæmia, may be due to temporary irregularities in the supply of blood to the brain, and may pass away without leaving any ill consequences behind, although their frequent occurrence acting on a highly susceptible organism may produce minute changes, manifesting themselves by various morbid mental phenomena. Andral, quoted by Bucknill and Tuke, lays down the axiom that "in every organ the diminution of the normal quantity of blood which it should contain produces functional disturbances, as well as the presence of excessive quantity of blood." It is difficult to determine whether these alterations in the quantity of blood circulating through the brain are local or general in character, but it seems reasonable to premise that both conditions are possible. It is not, however, sufficient to refer mental symptoms to hyperæmia in one case and to anæmia in another, for they themselves are frequently mere effects. In this connection the importance of the vaso-motor system must not be overlooked. Maudsley† believes that all active emotions are accompanied by changes in the circulation, through vaso-motor inhibition, and that

* "Psychological Medicine," page 586. † "Pathology of Mind," page 193.

vascular disturbances may be produced by them within the brain very much as blushing of the face and neck is produced by shame. Irregularity in the blood-supply of the brain produces a condition of irritation of that organ, though this need not necessarily go on to actual mental disease. The sluggishness of the circulation in the extremities of many asylum patients, especially dements, is very noticeable; and if this be any criterion of the state of their cerebral circulation, there is little difficulty in accounting for their mental symptoms.

The quality of the blood may be impure from some error in the processes of digestion, assimilation, or excretion. To take the most common instance of this, the presence of bile in the blood, even in healthy and strong-minded individuals, gives rise to gloomy forebodings and melancholy conceptions. Also uric acid in the blood of a gouty patient causes an irritability of temper which is sometimes so severe that it passes into an outbreak of maniacal excitement. Arguing from such well-known facts as these, and knowing the effects of certain drugs, as chloroform producing anæsthesia, nitrous oxide gas producing laughter, and alcohol producing hilarity and excitement, we must admit that the brain may be affected through its nutrition, or, in other words, through the quality of its blood-supply.

Of course the affections of the nervous system must not be approached from the vascular side only, but this aspect of the question is worthy of attention. In this connection it is interesting to remark that nervine sedatives are more or less vascular depressants, and that nervine tonics tend to raise the blood pressure.*

The bodily symptoms of insanity have had a fair share of attention devoted to them in late years. If we believe, as many do, that mental disease can be regarded by the physician only as abnormal manifestation of the psychical function of the brain due to bodily conditions, it is desirable to investigate thoroughly the physical condition of all patients who are mentally affected.

Patients admitted into asylums may be broadly divided into three classes—

(1) A small group consisting chiefly of cases of recent insanity with no ostensible symptoms except those of mental derangement.

* "Handbook of Treatment," Fothergill, page 509.

(2) A large group with well-marked symptoms of bodily disease which can be directly connected with the psychical symptoms.

(3) A group, intermediate in size, suffering from general debility or want of tone of the system, and in whom no organic or absolute physical disease can be detected.

Clouston* describes this third group as "such a lowering of the general condition of the body that it must be reckoned truly abnormal. This condition of body undoubtedly precedes certain forms of insanity and accompanies them. That there is no specific disease in most of such cases is proved by the recovery of many of them, and by the long life of many of the others." In 100 patients whose mental symptoms had lasted under six months, Dr. Clouston found 13 cases of this description. I have gone over the records of the last 500 patients admitted into this asylum, and I find that 47 men and 62 women of that number were in weak bodily health on admission, and in whom no specific disease was discovered after repeated physical examination. This excludes all old people over 65 years of age. Of these 109 cases 23 men and 29 women, or 47·7 per cent. of the total number, have been discharged recovered.

Griesinger† goes further than Clouston, and says that many inmates of asylums die from anæmia and marasmus without any serious local affection except perhaps a slight degree of atheroma of the vessels being discovered.

Chiefly with the object of ascertaining whether poverty of blood plays the same weighty predisposing part in the production of insanity that it does in the production of other diseases, I have made a series of observations, extending over a period of sixteen months, on the blood of insane patients. This is a field of clinical investigation which, so far as asylum-physicians are concerned, has as yet had little attention paid to it, although in the case of many diseases, physicians have been helped to a right diagnosis, and have derived many indications for treatment from a systematic examination of the blood.

The morphological elements of the blood in the normal state are the red and white corpuscles; by the aid of the

* "The Bodily Symptoms of Insanity." "Practitioner," 1871, Vol. ii., page 12.

† "Mental Diseases." New Sydenham Society's Translation, page 437.

microscope small granules floating in the serum may also be recognised, and when coagulation has taken place, a reticulum of fibrin. The colouring matter of the red corpuscles, or hæmacytes, which gives to the blood its red colour, is called hæmoglobin.

In examining the blood for clinical purposes there are three points to be considered—(1) Its richness in corpuscles; (2) The richness of the corpuscles in hæmoglobin; and (3) The amount of water diluting the corpuscles. Instruments of considerable precision, called respectively the Hæmacytometer and Hæmoglobinometer, have been devised for ascertaining the richness of the blood in corpuscles and in hæmoglobin. Inasmuch as the number of corpuscles present in any given bulk of blood is merely an expression of the proportion of corpuscles to the amount of plasma, variations in the number of hæmacytes counted might be caused by an increase or decrease in the quantity of plasma occurring, while the actual number of the corpuscles is stationary. Unfortunately we have as yet no means for determining this third factor during life, and this diminishes the value of results obtained by the above-named instruments.

All the methods devised for ascertaining the corpuscular richness of the blood consist in making a definite dilution of a certain quantity of blood, and counting the corpuscles in a certain volume of that dilution. Potain, Malassez, and Hayem have each devised an instrument adapted for clinical purposes, but their methods are cumbrous and inconvenient. The instrument I have used is Dr. Gower's hæmacytometer,* which is more simple for ordinary use, and is accurate enough for all practical purposes.

To eliminate as far as possible any instrumental error in the numerations, I invariably counted more than one drop of the mixture, and in the case of any marked discrepancy three or four drops have been examined and the mean of all the observations taken. The same instrument has been used throughout, and the blood to be examined was drawn from the finger without pressure.

The amount of hæmoglobin in the blood is ascertained by means of the hæmoglobinometer. The method consists in diluting a known volume of blood and comparing it with a

* For full description see "Lancet," 1st December, 1877, and "Practitioner," 1878, page 1.

standard solution. The average amount of hæmoglobin in each corpuscle is represented by a fraction of which the numerator is the percentage of hæmoglobin, and the percentage of red corpuscles the denominator. The observations with the hæmacytometer and the hæmoglobinometer were made simultaneously. Each observation took over half an hour to complete, and in not a few of the cases considerable difficulty was experienced in inducing patients to submit to the necessary puncture. The total number of observations represented by this paper is 420.

It is obvious that limitations of time and opportunity must narrow the scope of any experimental observations in such an extensive field of investigation; but the observations, which up to this time I have made may serve as an introduction to the further study of this important and interesting subject.

The special points I have endeavoured to determine are:—

(1) What is the amount of hæmoglobin and of red and white corpuscles in the normal condition of the blood?

(2) What is the condition of the blood in the class of patients who constitute the chronic inmates of asylums?

(3) Is the blood deteriorated in well-marked types of insanity, as General Paralysis and Epilepsy?

(4) Do variations occur in the blood of patients subject to attacks of periodic excitement?

(5) What is the state of the blood in patients when admitted?

(6) What is the state of the blood in patients who recover?

(7) What are the effects of various blood tonics on cases of recent insanity?

(8) Can any definite conclusions be arrived at from these observations which would be of practical value in the curative treatment of the insane?

I.

As a basis from which to work I first of all made a series of observations upon 30 cases of persons in presumably perfect health of body and mind. These, 15 males and 15 females, were selected chiefly from officials of the Asylum, and their respective ages ranged from 22 to 38 years. I give the results in a tabular form, showing the percentage amount of hæmoglobin and hæmacytes, and the proportion of white to red corpuscles in each instance.

A Table giving Percentage amount of Hæmoglobin and of Hæmacytes, and proportion of White to Red Corpuscles in the blood of 15 healthy persons of either sex.

Healthy Male Blood.				Healthy Female Blood.			
No.	Percentage of Hæmoglobin	Percentage of Hæmacytes.	Proportion of White to R. B. C.	No.	Percentage of Hæmoglobin	Percentage of Hæmacytes.	Proportion of White to R. B. C.
1	100	99·9	1 to 440	1	85	94·7	1 to 360
2	96	103·2	1 to 350	2	78	91·5	1 to 310
3	90	101·4	1 to 450	3	90	96·7	1 to 420
4	96	98·8	1 to 360	4	90	94·	1 to 280
5	90	99·2	1 to 430	5	88	90·9	1 to 360
6	100	102·4	1 to 480	6	80	93·2	1 to 380
7	90	99·	1 to 380	7	85	94·1	1 to 220
8	105	99·8	1 to 420	8	78	92·3	1 to 280
9	85	95·2	1 to 380	9	95	95·9	1 to 360
10	100	102·6	1 to 480	10	82	96·1	1 to 480
11	100	103·4	1 to 420	11	84	92·	1 to 380
12	95	102·5	1 to 340	12	88	91·7	1 to 430
13	95	101·9	1 to 440	13	80	89·8	1 to 210
14	104	105·1	1 to 510	14	90	95·2	1 to 290
15	95	102·7	1 to 450	15	86	94·8	1 to 460
Averages.	96	101·14	1 to 442		85·2	93·52	1 to 348

The average percentage of hæmoglobin is 96 in men and 85 in women. The variations are considerable, and there are greater fluctuations between the highest and lowest percentages in the observations in males than in those of females. The average number of red blood corpuscles per cubic millimetre is in men 5,075,000; and in women 4,676,000, or, expressing this in percentage form, male healthy blood, 101·14; female, 93·52. These results are rather higher than those of Laache,* who, in an analysis

* "Die Anäemie" von S. Laache. Christiania, 1883. Reviewed "Medical Times," 1884, page 28.

of 60 cases, found the mean to be 4,970,000 per cubic millimetre for men, and 4,430,000 for women (99·4 and 88·6 per cent.). Speaking generally, we may represent the amount of red corpuscles in healthy male blood by 100, in females by a slightly lower percentage. In my observations the average proportion of white to red corpuscles is 1 to 442 for males; 1 to 348 for females. There were variations in the individual percentages and proportions, but these call for no special comment.

In the observations with the hæmacytometer a diluting fluid of constant strength, that recommended by Gowers, (sodae sulph. grs. 104, acid acet. ʒi, aquæ destill. ad ℥iv) was employed. This solution has some effect in changing the shape of the corpuscles, but has no influence on their diameter. The size of the red discs varies considerably, even in healthy blood. Hayem, quoted by Dr. Norris,* says that 75 per cent. of the corpuscles are of average size, 12 per cent. small, and 12 per cent. large. This is an important point, for it is obvious that if the small forms are more numerous, the average corpuscular diameter is lower than normal, and if there be a number of large cells in the blood under observation the corpuscular diameter of the cells is relatively increased. In my observations I simply made a general note of the relative size of the corpuscles in each instance, and did not attempt to go into detail. In healthy male and female blood the large majority of the hæmacytes were of an average uniform size, while large and small forms collectively did not exceed 10 per cent. of the total number. In two instances in the case of men I noted that large-sized corpuscles were more numerous than usual, and the blood of one female contained about 50 per cent. of blood discs below the normal size. In none of these cases, however, did the percentage of hæmacytes vary much from the normal standard.

Small granule-cells were observed in fully two-thirds of the cases. These small particles, called by some "hæmatoblasts," are a normal constituent of the blood, and, unlike the ordinary red blood corpuscles, are stained red by carmine. It is stated that they become relatively more numerous in blood which is undergoing recuperation. A few corpuscles were crenated, but I am not prepared to say whether this crenated condition of the cells was influenced by the diluting solution employed.

* "The Physiology and Pathology of the Blood," page 165.

II.

I adopted the following means for ascertaining the condition of the blood in the class who form the unrecovered residuum of asylum-patients :—I took 40 dements or chronic maniacs in average bodily health, and had them weighed periodically. These patients had been resident in the asylum for periods varying from four to 22 years, and none had been under medical treatment for some years previously. I give the series of observations in tabular form, dividing the cases into four groups according to age. I submit also a few remarks on each group.

B. Tables showing percentage of Hæmoglobin and Hæmacytes in the blood of a series of Dements at three different periods, and Weights at four different periods.

Table I.—Ten Dements Between 20 and 30 Years.

Case.	Period of Residence.	Weights in lbs. at four different Periods.				Percentage of Hæmoglobin.				Percentage of Hæmacytes.			
		Jan, '82.	June, '83.	Nov, '83.	Mar, '84.	June.	Nov.	Mar.	Average.	June.	Nov.	Mar.	Average.
1	6 yrs.	143	146	146	146	75	70	74	73	96·8	97·4	96·9	97
2	5 yrs.	134	130	128	129	64	66	65	65	95·7	90·8	92·2	92·9
3	8 yrs.	153	150	144	147	62	64	62	62·6	89·7	85·9	87·8	87·8
4	4 yrs.	160	164	162	162	65	68	65	66	88·6	90·1	89·5	89·4
5	4 yrs.	156	154	156	155	62	68	66	65·3	95·6	94·5	94·2	94·7
6	7 yrs.	158	156	155	155	70	68	62	66·6	94·7	93·3	94·1	94
7	5 yrs.	149	151	152	149	68	64	64	65·3	86·2	85·1	86·8	86
8	11 yrs.	139	144	146	145	68	68	68	68	87·7	89·2	88·5	88·4
9	7 yrs.	133	125	126	126	55	55	55	55	82·7	81·8	82·2	82·2
10	4 yrs.	164	159	158	158	70	72	72	71·3	91·4	92·1	91·8	91·7
Avgs.	6·1	148·9	147·9	147·3	148·03	65·9	66·3	65·3	65·8	90·91	90·02	90·40	90·44

The period of residence of the patients varies from four to 11 years. Their weights range from 126 to 164 lbs., and it will be observed that the weights, taken at four different periods in 26 months, show slight variation in individual instances, the difference never exceeding 7 lbs., while the average weight for the 10 patients at each period of the

year is very uniform. The percentage of hæmoglobin is considerably below normal, and varies from 55 to 75 per cent., as compared with 96, the normal standard. While the amount of hæmoglobin varied in individual cases, the percentage in each is very uniform at the three different periods, thus showing that the season of the year has little effect on the quantity of hæmoglobin. Although the lowest percentage of hæmoglobin was observed in the lightest patient, it is not clear that we are justified in assuming any relation between the variations in weights and variations in the percentage of hæmoglobin, for in two of the cases a higher percentage was registered during the period when the weight was lowest. The percentage of hæmacytes varies from 3·7 to 19·3 below normal, while the average is fully 10 per cent. below the standard. As in the case of the hæmoglobin, there are variations in the absolute and relative averages at different seasons of the year; but this does not occur in such a precise form as to enable one to make any deductions.

Table II.—Ten Dements Between 30 and 40 Years.

Case.	Period of Residence.	Weights in lbs. at four different periods.				Percentage of Hæmoglobin.				Percentage of Hæmacytes.			
		Jan, '82.	Nov, '83.	Feb, '84.	May, '84.	Nov.	Feb.	May.	Average.	Nov.	Feb.	May.	Average.
1	18 yrs.	166	162	167	164	70	70	70	70	92·8	92·6	91·8	92·4
2	14 yrs.	148	150	148	148	70	70	72	70	92·1	91·7	92	91·9
3	11 yrs.	139	133	136	136	68	74	70	70·6	89·2	92·0	90·7	90·6
4	9 yrs.	138	138	139	138	66	70	64	66·6	86·7	90·9	87·8	88·4
5	14 yrs.	170	166	166	164	66	68	68	67·3	90·5	86·1	88·4	88·3
6	21 yrs.	151	150	147	148	74	68	72	71·3	93·9	92·5	92·8	93
7	9 yrs.	121	116	120	119	65	64	65	64·6	86·5	83·8	85	85·1
8	6 yrs.	135	129	130	128	60	58	62	60	87·4	89·7	87·9	88·3
9	4 yrs.	152	152	150	152	75	70	72	72·3	89·2	90	88·7	89·3
10	11 yrs.	138	135	130	124	58	60	60	59·3	85	87·2	85·6	85·9
Avgs.	11·5	145·8	143·0	143·3	142·1	67·2	67·2	67·5	67·3	89·33	89·65	89·07	89·35

It is worthy of remark that we have diminution of the percentage of corpuscles with an increase of hæmoglobin. The

converse likewise occurs, and we have a decrease in the percentage of hæmoglobin and an increase in the number of corpuscles.

The average period of residence of the patients in this group is 11½ years. There is a greater variation in the weights at different periods than in the previous group, one patient alone losing 14 lbs. in 29 months, while the average loss of weight for the 10 patients during that period is 3·7 lbs. The percentage of hæmoglobin is very uniform, both in the individual cases and in the average of each period. The average amount of hæmoglobin is slightly higher than in the first group. On the other hand, the average number of hæmacytes is 1·1 per cent. lower, while the variations in the averages for each period of the year are more uniform, and the individual averages are less uniform than in Table I. There appears to be no relation between variation in weight and increase or decrease in the percentage of hæmoglobin and hæmacytes.

TABLE III.—TEN DEMENTS BETWEEN 40 AND 50 YEARS.

Case.	Period of Residence.	Weights in lbs. at four different periods.				Percentage of Hæmoglobin.				Percentage of Hæmacytes.			
		Jan, '82.	Dec, '83.	Mar, '84.	May, '84.	Dec.	Mar.	May.	Average.	Dec.	Mar.	May.	Average.
1	15 yrs.	160	158	156	154	75	70	70	71·6	96·1	91·7	92·5	93·4
2	7 yrs.	158	150	148	148	65	68	65	66	89·2	96·1	92·2	92·5
3	20 yrs.	140	133	132	132	62	64	64	63·3	90·8	89·5	90·8	90·3
4	5 yrs.	150	154	150	150	78	75	75	76	95·1	91·5	91·9	92·8
5	6 yrs.	152	151	154	154	65	65	68	66	91·7	94·1	92·7	92·8
6	17 yrs.	164	158	162	161	65	68	68	67	88·9	91·7	87·9	89·5
7	22 yrs.	140	144	139	138	64	65	65	64.6	88·9	90·2	89·1	89·4
8	18 yrs.	184	190	190	196	64	65	64	64·3	87·8	89·2	88·1	88·3
9	22 yrs.	154	154	152	150	58	55	58	57	79·3	79	80·9	79·7
10	15 yrs.	140	137	139	136	62	65	60	62·3	84·6	85·7	83·9	84·7
Avgs.	14½	154·2	152·9	152·2	151·9	65·8	66·0	65·7	65·8	89·24	89·87	89	89·37

The special points in this table are: An average period of residence of 14½ years; an average loss of weight of 2·3 lbs.

in 29 months; an average percentage of hæmoglobin similar in amount to that in Table I., but less than in Table II.; a lower percentage of red corpuscles than in either of the previous groups.

Table IV.—Ten Dements Between 50 and 60 Years.

Case.	Period of Residence.	Weights in lbs. at four different periods.				Percentage of Hæmoglobin.				Percentage of Hæmacytes.			
		Jan, '83.	Dec, '83.	Mar, '84.	May, '84.	Dec.	Mar.	May.	Average.	Dec.	Mar.	May.	Average.
1	14 yrs.	172	176	174	175	65	68	68	67	87	86·9	87·8	87·2
2	22 yrs.	118	108	108	110	74	68	70	70·6	87·4	87	88·9	87·7
3	12 yrs.	156	155	*—	—	66	—	—	66	87·7	—	—	87·7
4	22 yrs.	158	154	148	152	68	70	65	67·6	87·8	87·1	86·6	87·1
5	13 yrs.	172	168	172	173	55	60	60	58·3	88·4	87·3	87·8	87·8
6	7 yrs.	163	158	156	158	68	70	70	69·3	87·7	86·9	86·5	87
7	15 yrs.	174	176	172	172	70	70	70	70	86·3	85·9	86·7	86·3
8	22 yrs.	148	148	154	149	70	72	70	70·6	86·7	87·2	87·2	87
9	22 yrs.	175	171	170	166	60	58	60	59·3	87·4	86·9	85·4	86·5
10	22 yrs.	138	143	145	147	58	60	58	58·6	87·8	89·2	88·6	88·5
Avgs.	17·1	157·4	155·7	155·4†	155·7†	65·4	66·2†	65·6†	65·73	87·42	87·15†	87·27†	87·28

* Died of Pneumonia, March, 1884. † Average of Nine Observations.

This table is incomplete, inasmuch as one of the patients died of an intercurrent attack of pneumonia, and his blood was examined only on one occasion. The table, however, brings out more forcibly the diminution in the average percentage of red corpuscles noted in the third group.

The proportion of white to red corpuscles was also ascertained, but as they showed so little variation from the normal standard, I have not given the results in the tables.

The relative size of the corpuscles was fairly uniform. There was an almost complete absence of small forms, though corpuscles of large size were observed in several of the cases. Small granule-cells were seen in only six of the 40 cases under observation, and when they were detected they were ill-defined, and did not occur in groups, as is the case in normal blood.

Of these 40 patients, six in the first group, five in the second group, three in the third group, and four in the fourth group had a course of ferruginous or nervine tonics during the earlier period of their residence in the asylum, but in no instance had tonics been administered during the three years preceding the observations.

Four patients in the first group, three in the second, and one in the third group were known to be masturbators, and it is worthy of remark that the average percentages of hæmoglobin and of hæmacytes in these cases were rather below the percentages in the tables in which the observations on their blood is detailed. With the object of seeing whether this was merely a coincidence, I examined the blood of four other patients known to be addicted to masturbation; and, without entering into detail, I am in a position to state that the percentage of hæmacytes in the patients examined was considerably below the normal standard, while the amount of hæmoglobin was also diminished, though to a less extent.

Summarising the results of my observations on the class of dements or chronic maniacs, an examination of the foregoing tables appears to warrant the following conclusions:—

(1) The percentage of hæmoglobin is considerably below the normal standard, and does not appear to be influenced by the age of the patients.

(2) The percentage of hæmacytes is likewise diminished, and this diminution progresses with the age of the individual.

(3) The proportion of white to red corpuscles is normal.

(4) The blood is deficient in hæmatoblasts.

(5) In the patients over 30 years the weight decreases, but this decrease does not appear to influence the relative percentage of hæmoglobin and of hæmacytes.

(6) The period of residence and the season of the year do not affect the absolute proportional averages of the constituents of the blood.

(*To be continued.*)

CLINICAL NOTES AND CASES.

Case of Sexual Perversion in a Man. By GEORGE H. SAVAGE, M.D., Bethlem Hospital.

A young man, single, aged 28; father violent and excitable; one brother odd, and another a drunken scapegrace.

The patient himself is of middle height, anæmic and emotional. He began his description of his state of mind by saying that he felt he must kill himself. He said he did not feel any real mental depression, but he felt so ashamed of his unnatural state that he wished he were dead, to prevent scandal to his family. He had been to hear many religious teachers, and, in fact, was sent by one of these to see me.

He had always been industrious and hard-working, and made a good living as a traveller for a foreign house. He had led a very solitary life, and had never indulged in worldly amusements.

He was proud of repeating that he was a professing Christian. He had but one pleasure, and that was in music, and of late he had given this up, as it took him into society, where he met other men. At eleven years of age he learnt to masturbate, and had continued the habit ever since.

He has never indulged in sexual congress. He says he has no desire or lust after women, and, though he will not be sure, he thinks he never did have any lust for women.

He told his employer of his feeling, and said that he felt that he must embrace him. This the master resented, and said if he "came any more of that stuff" he should discharge him.

He says in America he was fairly comfortable, because the men were only of moderate size and height; but that in England, where there are so many men over six feet, he is perfectly miserable. He says the sight of a fine man causes him to have an erection, and if he is forced to be in his society he has an emission.

He has no loss of memory, no tremulousness; his senses appear to be normal in every respect, and his reasoning powers in no way affected.

I recommended him to follow his occupation with energy,

to seek mixed society, to go to places of amusement in cities, and to pursue his musical tastes.

I have no further news of him.

I have met with only one other man, who was in a general hospital, who had similar symptoms, but he had malformation of his genetalia, and his sex was at least doubtful.

In one female patient, in Bethlem, there was powerful lust towards those of her own sex. She died, and an infantile uterus was discovered. One wonders if this perversion is as rare as it appears, when we meet with trials such as have been held in Ireland.

Supposed Case of Acute Mania, Terminating in Death after a Succession of Epileptiform Attacks. By W. E. Ramsden Wood, M.A., M.D., Assistant Medical Officer, Bethlem Royal Hospital.

History of Case.—W. P., æt. 38, was admitted into this hospital May 19th of this year, suffering from acute mania. He was transferred from Camberwell House, where he had been about a month. From his friends we heard that he had had a slight attack three years ago. He is said to have been very much worried in his domestic arrangements; they acknowledged also that he had given way to drink for a long time. The first symptoms were evinced by his becoming generally excitable, and going out at any hour of the day or night and preaching in the streets. This occurred about six weeks before his admission here. Within a few days he had hallucinations of sound and sight. He thought that his father (who has been dead some years) came down from heaven to him; also that a mouse, which was really our Lord, had held a conversation with him. On Easter Sunday he preached in his church for two hours and a half. During this time he was very sleepless, and considered himself a prophet.

He was said to have had rheumatic fever three years ago. His father died of chronic rheumatic arthritis. Otherwise there is no history of neurosis in his family.

On admission it was noted that he was a thin man of medium height, dark hair, beard, &c. He had a very haggard expression. He was utterly incoherent, and noisy. He recognised nobody, was continually chattering, and constantly using the most obscene and blasphemous language. He was somewhat exhausted, but had tremendous outbreaks of violence. At first he took food only after a great deal of persuasion. Pupils equal; no tremor of facial muscles.

June 11th.—Taking food well, and is gaining flesh. Very noisy and incoherent all day and night. Has become very dirty in his habits. Recognised his wife and brother.

June 18th.—In the same noisy, incoherent condition; refusing

food; getting emaciated. Voice becoming very hoarse from continual shouting.

June 28th.—Dulness at right base, extending upwards to angle of scapula. Tubular breathing over area of dulness. Getting much weaker and quieter.

July 11th.—Last night, about 8 p.m., suddenly taken with an epileptiform seizure; the first lasting about twenty minutes. This was soon followed by three others, the patient not regaining consciousness in the intervals. In two fits the right side was strongly convulsed, and in two the left side was similarly affected. He passed his motions and water under him. After these he slept quietly for some time.

July 12th.—Very drowsy for some hours after the attacks, but took nourishment fairly well. Later in the day he became excited again and very restless. The patient has lost 2 stone 1 lb. in weight since May 9th.

July 13th.—At 5 a.m. had another series of epileptiform seizures. The convulsions were confined chiefly to the left leg and the right arm, with a good deal of contortion of the facial muscles. This condition lasted about four hours, when the attacks ceased. He never again showed any signs of consciousness, but gradually became weaker, and died at 3.45 the same day.

P.M. was made 42 hours after death. Calvarium dense. Much flattening of frontal lobes, especially marked in the left second frontal. Adhesions, most marked at the base of the first frontal of the right side, extending along to the extreme front. On the left side there were adhesions over the first and second frontal, but less numerous than on the right side. There were adhesions also in both regions along the longitudinal fissure. The brain-substance was very soft, and there was some excess of subarachnoid fluid at the base. Weight of brain, 49 ozs.

Heart firmly contracted, valves and muscular substance normal, a a few small patches of atheroma on the aorta; 9 ozs.

Lungs.—Excess of fluid in both pleural cavities, but most in the left. Lower lobe of right lung solid and friable. Lower lobe of left lung in a similar condition to that of the right, but less advanced. Right lung, 26 ozs.; left, 22.

Liver uniformly dark in colour; 50 ozs.

Kidneys.—Capsules separated easily. Right, 4 ozs.; left, 4 ozs.

Spleen normal; 3 ozs.

The chief interest of this case is its rapid termination. During the progress of the case the symptoms were only those of very acute mania, and I may say that general paralysis of the insane was hardly thought of; but from the succession of epileptiform seizures, and the post-mortem appearances, one could hardly classify it under any other form of mental

disease. In conclusion, I would only add that this is another case which ought to prove how important it is that there should always be a post-mortem examination in all cases that die in asylums; for I presume that there are few who would not acknowledge that the chances of hereditary predisposition to this patient's offspring are considerably lessened by the fact that the case proved to be one of general paralysis, and not a case of acute mania rapidly terminating in death.

Case of Insanity after Head-Injury. By Dr. H. Rayner, Hanwell.

The following case is interesting as showing traumatic injury as an exciting cause:—

A. D., 26, admitted 12th December, 1883. Traveller, a well-developed young man, without history of insanity in his family; but one brother died of phthisis, and two others died in infancy of convulsions, and two of water on the brain.

He has always been healthy and strong until present illness, but had taken a considerable amount of stimulants in the transaction of business. Three weeks ago, when under the influence of liquor, he fell from the step of his vehicle backwards, sustaining a wound one inch to the right of the occipital protuberance. He was "stunned" at the moment, and was more or less insensible for twenty-four hours afterwards, during which time he had three "fits," bit his tongue badly on the right side, and was much convulsed.

The next day he complained greatly of pain all over his head, believed that he was giving away watches and chains, became restless and unmanageable, and was finally brought here after three weeks.

On admission, slight inequality of pupils existed, the right being the larger. There were also tremor and slight inco-ordination of the facial muscles. His appearance suggested the idea of general paralysis, but there was no mental enfeeblement, and the exaltation had disappeared. He complained of sleeplessness and of pain in the right frontal and anterior parietal regions. The sleeplessness rapidly improved, but for some time he complained of inability to sleep for an hour or two after retiring to rest. The pain in the head and sleeplessness gradually passed away, but after they had ceased were easily reproduced by exertion, or anything which increased the general or local circulation (as dancing or reading). He was discharged recovered on 7th Feb., 1884, and has since remained well.

The treatment consisted in rest at the outset, combined with milk diet, and, later on, tonics, with absorbents.

The history of this case suggests that there had been some contusion or commotion of the cortex of the cerebrum

at the seat of contre-coup, which, from a careful consideration of the direction of the blow, was probably localised in the upper surface of the left anterior lobe and the adjacent parts of the motor area.

The toxic effect of the alcohol acting on this contused area may be presumed to have caused the epileptic attacks; the mental symptoms were probably due to hyperæmia of the same areas, the local loss of vascular control being further evidenced by the difficulty in going to sleep and by the recurrence of headache on excitation of the circulation.

The recovery was chiefly due to the excessively good nutritional and reparative powers of the individual. In a less healthy person, or under unfavourable circumstances, it would not be difficult to imagine a chronic degenerative process developing from an injury attended with such symptoms.

OCCASIONAL NOTES OF THE QUARTER.

The Lunacy Laws.

There is apparently no subject in the present day upon which more seems able to be said and written, or about which the public appears to have less exact knowledge, than that of the Lunacy Laws.

It is so easy to talk glibly about danger to the liberty of the subject, and so difficult to guard against the license into which that too often degenerates.

So much feeling is imported into each discussion when the periodical recrudescence in the public mind on this question occurs, that a temperate and reasonable discussion of it becomes almost impossible. While the supposed heinousness and danger of the Lunacy Laws are set in the light by the interested or the ignorant, there seems to arise a conviction that whatever is must be wrong, and the dangers to society of delay in treatment, and the risks of reliance upon the apparent harmlessness of mild forms of insanity, are temporarily relegated to an obscurity, out of which they too often have a rude resurrection.

While no well-informed person doubts that the Lunacy Laws are capable of improvement, and that personal liberty needs to be hedged about by every safeguard with which the law and public opinion can environ it, so no one should fail to remember that society has a right to be protected, not only from gross

crime and its consequences, but also from minor evils which insanity in certain phases has a special faculty of originating.

The whole subject is one of extreme delicacy and difficulty, and needs to be handled, not by emotional legislation which can only make matters far worse than the worst which is now possible, but by the deliberate judgment of competent persons who possess both the knowledge and the capacity to deal with the matter in the best interests of all who are or may be concerned, in other words, of society in general, and not of a section of it only. It is easy to apply derogatory adjectives to the members of our specialty and of our profession generally, and to accuse them of inferiority, dishonesty, or heartless conspiracy. But it would be at least fair to withhold accusation until more or less general dereliction has been proved, and to assume that a class of persons is innocent until it has, in some measure at least, been proved to be guilty.

Amid all the heat of discussion two facts should, we think, be borne in mind—the first that a Select Committee of the House of Commons, after an exhaustive enquiry as to the operation of the Lunacy Laws, have reported that they were unable to detect any instance of *mala fides* in their administration, and the second that there is probably no medical man who would not welcome such alterations therein as should deprive him of a responsibility towards the public which brings with it but little gain, no honour, and a liability to serious annoyance, vexation, and loss.

Just before the last number of this Journal went to press, a discussion occurred in the House of Lords with reference to the Lunacy Laws, which it may be well to reproduce here as showing not only the crude views which are entertained upon this subject in some quarters, but the sober convictions of an experience as varied and extended as that of Lord Shaftesbury, whose whole career has borne witness to an honesty which is beyond suspicion, and an earnest and practical hostility to oppression and wrong in whatever form they might be contemplated, which must give his words unusual force.

The following report appeared in the daily papers of the 6th May :—

HOUSE OF LORDS.

THE LUNACY LAWS.

The Earl of Milltown rose to call attention to the observations made by Mr. Baron Huddleston in the case of "Weldon v. Winslow," and to move "that in the opinion of this House the existing state of

the Lunacy Laws is eminently unsatisfactory, and constitutes a serious danger to the liberty of the subject." The noble Earl proceeded to quote from a summary of the facts of this case published in *The Times*. He would abstain from commenting on the merits of a case which was still *sub judice*, but he might be permitted to quote the opinions of Judges on the present condition of our Lunacy Laws. The noble Earl then read copious extracts from *The Times* reports of the judgments of Mr. Baron Huddleston on the trial, and of Mr. Justice Manisty on the application for a new trial. The Lunacy Laws of this country consisted chiefly of the statutes 8 and 9 Vict., chap. 100, and 16 and 17 Vict., chap. 96. Lunatics were in the eye of the law divided into two classes, paupers and non-paupers. The former class did not merely include paupers in the strict sense of the term, but a constable or relieving officer might arrest anyone found wandering abroad and bring him before a justice of the peace, and on the certificate of one medical man and the warrant of justices, for whose competence there was no guarantee, such a person might be incarcerated for life. Thus any one of their Lordships might be confined for life in that manner as a pauper lunatic. But if the lunatic was found to possess means, he was transferred to a licensed house. In the case of a non-pauper the certificate of two medical men was required. There were in this country 68,000 pauper lunatics and 7,000 non-pauper lunatics. The state of the law was positively startling. Any person who could obtain certificates from any two out of the 20,000 medical practitioners on the register could consign any other person to incarceration in a madhouse, while no private person could obtain the release of such incarcerated individual without the consent either of the person who brought the incarceration about, or of the Lunacy Commissioners. Moreover, no criminal prosecution could be instituted for breach of the Lunacy Laws except by the Commissioners in Lunacy. The necessary certificate could be signed by any medical practitioner who had seen the patient for a single moment, and from his decision there was practically no appeal. In case of even gross cruelty being practised upon the patient, the police could not interfere because the order of the Commissioners was a sufficient warrant for everything that was done in the matter. In regard to the practice of keeping lunatics in private asylums, kept simply for profit, the whole system had been described by the noble Earl below him (the Earl of Shaftesbury) as utterly abominable and indefensible, and it certainly was one which ought not to exist in this age and country. He trusted an end would be put to the present intolerable state of things, and that a most damning blot would be removed from the Statute-Book (hear, hear). He concluded by moving the resolution of which he had given notice.

The Earl of Shaftesbury said their Lordships would at once perceive that his reply must be somewhat prolonged, so many were the details and charges made by the noble Earl who had just sat down (the Earl

of Milltown). Had he (the Earl of Shaftesbury) not been on the Commission in Lunacy for more than 50 years, first as Acting Chairman, and since 1845 as Permanent Chairman, he would not have interposed ; but he thought it necessary, and almost a point of duty, to explain the state of things and calm the public mind. The special case of Mrs. Weldon could not then be discussed, as the matter was still *sub judice.* The lady had moved for, and had obtained, a new trial ; and nothing at present could be said on the question. He wished, however, to state that the affair had never come before the Commissioners—their jurisdiction did not begin until a patient had been lodged within the walls of some licensed house. Neither did he know anything of the case, except what he had gathered from the newspapers ; but it certainly had struck him that, if the evidence had been no stronger on the certificate, had one been sent to their office, than that which appeared only in general rumour, he, at least, should have been disposed to set the lady at liberty. But the *obiter dictum* of Baron Huddleston might come under observation. It was as follows, and taken from *The Standard*, 19th March, 1884:—

> Now, I say distinctly, I wish I could treat this case apart from all technicality ; but I must express my astonishment that such a state of things can exist, that an order can be made by anybody on the statement of anybody, and that two gentlemen, if they have only obtained a diploma, provided they examine a patient separately, and are not related to keepers of a lunatic asylum, and that on this form being gone through, any person can be committed to a lunatic asylum. It is somewhat startling—it is positively shocking—that if a pauper, or, as Mrs. Weldon put it, a crossing-sweeper, should sign an order, and another crossing-sweeper should make a statement, and that then two medical men, who had never had a day's practice in their lives, should for a small sum of money grant their certificates, a person may be lodged in a private lunatic asylum, and that this order and the statement, and these certificates, are a perfect answer to any action.

Now, he was certain that if the learned Baron had known the law, or had read the Report of the Committee of the House of Commons printed in 1878, he would never have made such an observation. First, he spoke, after a very invidious fashion, of any two gentlemen who had obtained a diploma. His Lordship should have remembered that, by the amending Lunacy Act of 1862, the qualifications of those who were empowered to grant certificates were very stringent. It is said that the term physician, surgeon, or apothecary, whenever used in the Lunacy Acts, should mean a person registered under the Medical Act of 1858 ; a person, therefore, of adequate professional fitness. He added, equally invidiously, that they might never have had a day's practice—possibly, though not probably—and, indeed, were practice in lunacy required as a qualification, we should not find one in 10,000 of the Medical Profession at present masters in the art. He closed by an assertion that these certificates were a perfect answer to any action. Where had the learned Baron found this law? Had he never heard of the case tried in the Courts of "Hall v. Semple,"

in which Mr. Hall, a liberated patient, prosecuted Dr. Semple for negligence in framing the certificate, and obtained damages to the amount of £150? There was a similar power against the person who signed an order of admission. Three years ago, the case of "Noel v. Williams" had been tried in Court. Mr. Noel, a discharged patient, sued his brother-in-law, Mr. Williams, who had signed the order; and though Mr. Williams obtained a verdict on every point, he had to bear the expenses of his defence, a sum which amounted to not less than £3,000. As to the order, he (the Earl of Shaftesbury) admitted that it was a weak point; theoretically, it was, no doubt, imperfect, though practically it had worked without any evil results. The history might be stated from his own evidence given in 1877—

With regard to the orders, I understand your Lordship to agree that it is in some respects undesirable that a person, a perfect stranger to a patient, should sign the order; do not you think that where there is a case, and no near relative is to be found to sign the order, it would be desirable that the order for admission should be signed by some public official? I believe I explained the reason of the state of the order to be this—In the year 1845, when we were framing the Bill, we were exceedingly puzzled as to what to do, so many cases had come before us of persons being suddenly seized in hotels, in lodging-houses, in mere apartments where there was nobody who knew whence they came or whither they were going; they were foreigners, Americans, medical students and law students, and all sorts and sizes of people, travellers only resting for a night, and we were obliged to leave it in that way that any person might sign the order for admission into any asylum. I have no doubt, but I do not recollect it, that we saw it was very imperfect, and that we intended to amend it, but we forgot it; and so little abuse arose upon it, and so very few bad cases came before us, that we totally forgot the matter.

Here, again, the learned Baron had put the case most invidiously. A crossing-sweeper, he said, might be called to sign an order of admission into a lunatic asylum. Well, but there were things so utterly improbable as to amount almost to impossibilities. The Queen might make a crossing-sweeper a Duke, and give him a seat in their Lordships' House; but did any of their Lordships fear such an issue? It was a weak point, no doubt, and required amendment; but in nearly 40 years there had been no complaint, and probably not one in 500 orders had been signed by any but some relative or friend. All this was before the Committees of 1859 and 1877, and they had not taken the formidable view of the learned Baron. They had accepted many of the propositions of the Commissioners, and had added some of their own, which were then wanting in enactment. And here he might add, in reply to the assertion of the noble Earl opposite, that the order could inflict perpetual confinement, that the Commissioners could, if they saw fit, set aside the order. But let their Lordships then consider the ominous announcement of the noble Earl, that the state of the Lunacy Laws constituted a serious danger to the liberty of the subject. The two Committees of 1859 and 1877 had come to no

such conclusion; on the contrary, they had rejoiced in the many and vast improvements. How could they have feared for the liberty of the subject in the face of such a statement as that he had made before them? From 1859 to 1877 there had passed through the office of the Commissioners 185,000 certificates. Of these, some six or seven had demanded the attention of the Select Committee of the House of Commons; but all, upon investigation, were found to be just and good. During the same interval there had been 90,000 liberations, of which 22,000 were from licensed houses. The Returns up to the present day were equally satisfactory, a sufficient refutation of the common assertion that persons thrust into private asylums would never get out. There were, he believed, fewer cases of mistake in placing patients under care and treatment than of miscarriages of justice in Courts of Law. The noble Earl ought, in candour, to have quoted that part of the Report in which the Select Committee had spoken of the vast and beneficial progress made in the treatment of lunacy. It was as follows :—

> The Committee cannot avoid observing here that the jealousy with which the treatment of lunatics is watched at the present day, and the comparatively trifling nature of the abuses alleged, present a remarkable contrast to the horrible cruelty with which asylums were too frequently conducted less than half a century ago, to the apathy with which the exposure of such atrocities by successive Committees of this House was received, both by Parliament and the country, and to the difficulty with which remedial enactments were carried through the Legislature, while society viewed with indifference the probability of sane people being in many cases, confined as lunatics, acquiesced in the treatment of lunatics as if they were outside the pale of humanity, and would have scarcely considered a proposal to substitute for chains and ill-usage the absence of restraint, the occupation and amusement, which may be said to be the universal characteristics of the system in this country at the present day.

And, again, they said—

> Assuming that the strongest cases against the present system were brought before them, allegations of *mala fides* were not substantiated.

He could assure their Lordships, from long observation, dating back more than 50 years, that it would require much time, and much power of description, to set before them the state of degradation and suffering in which lunatics were found by the inquiry that commenced in 1828. Manacles and leg-locks were in universal use—many were chained to the wall, almost all in filth, disorder and semi-starvation. He mentioned all this to show that great and good things had been done under the existing Lunacy Laws; and that some gratitude was due to God for having given the will and the power to raise them from such misery. Now, he did not mean to say that perfection had been reached—very far from it; but he urged their Lordships to proceed with care and caution, following experience, and the discoveries of science, and not preceding them by hasty legislation, which might

throw them back to the condition of half-a-century ago. But while they were considering, and jealously guarding the liberty of the subject, they must also consider the value and necessity of early treatment of insanity. On one point there was, it might be asserted, a consensus of opinion among all medical men, and, indeed, laymen, who had studied the question. Quotations of evidence to that effect might be multiplied, almost without limit. Dr. Sutherland maintained that if cases were taken at the very commencement of the disorder, full 85 per cent. might be cured. Dr. Conolly stated certainly not less than 50 per cent.; but the whole might be summed up in a most valuable extract from the Report of Mr. Ley, the Medical Superintendent of the great County Asylum at Prestwich, in Lancashire—

> "The total number," said Mr. Ley, speaking of a particular year, "of curable cases in the 446 admissions was 209; 113 of these have been sent out recovered, and, in all probability, 70 more will be discharged during the current year. Eighty-nine per cent. of the total recoveries occurred in those who were admitted while the attack was yet recent; only 11 per cent. are from those who were allowed to remain without proper treatment for a long time after the malady had declared itself. The duration of residence in these recoveries varied from four weeks to twelve years, the average duration being much augmented by the recovery of some few who had resided in the asylum above a year."

This was his summing up, and this was the summing up of every medical man he knew.

> "These results," Mr. Ley continued, "prove what has so often been urged before, that insanity in its early stages is as curable a disease as any other in the catalogue of human disorders."

The evidence from America was abundant and equally decided. Though he would not add anything to the law to give facilities for the shutting up of persons under the charge of insanity, so fearful was he of the possibility of error, he would do nothing to diminish them. He spoke in the interest of the patient, for whom a cure thus became comparatively easy, and in the interest of the world at large also, who had a deep concern in the abatement of that terrible disorder. The impediments were grave and numerous already—the reluctance of parents and relatives to see, and then believe, the first symptoms of a disturbed intellect; the serious step of consulting a medical man on the point, even though he were the physician of the family; the fear lest anything should transpire, and the public be admitted in any way to the sad secret: all these feelings postponed the final decision, until by long continuance the affection had become almost hopelessly confirmed. If, then, that repugnance existed under the present system, what would it amount to were the magistrate called in or a jury summoned, who never allowed anyone to be mad unless he had committed some overt act whereby the disorder was proved to be nearly inveter-

ate? Here the pauper had a great advantage over the class above him. He was taken to the asylum in the first stage of his affliction, and hence the public asylums claimed the superiority in the number of cures. Certainly, the tables showed that it was so, though, perhaps, by reason of the very early discharge, there were many cases of relapse. Too long detention after cure had been urged against the licensed houses. In former days it might have been so, but by no means always with a bad motive. He did not believe that many such cases could occur in the present day. He did not deny the difficulty —he might say the perilous difficulty in attempting to undertake early treatment—of discerning between a transient eccentricity of habit, manner or temper and the slight symptoms of incipient mental disturbance. An error on either side was deeply injurious. The error which led to the confinement of the patient might inflict, though the patient was speedily removed, the taint of supposed insanity; but the error which denied the necessity of it might inflict a greater harm, and fix on the patient the malady for ever. It demanded almost superhuman sagacity, and showed how necessary it was to be cautious, to avoid hasty legislation, and await the further developments of that important branch of science. He feared that all the proposed enactments that tended to increase publicity, and render impossible that amount of privacy that was naturally and justifiably demanded in these delicate matters, would tend to a vastly extended system of clandestine confinement. Single patients, as they were called, were persons living alone under restraint, and committed to the charge of a doctor, a clergyman, or an attendant. Where two or more, being lunatics, resided under the same roof, the law required that a license should be taken out; where only one, a certificate. There was great difficulty in the discovery of such cases; many of them were put out on the false plea that they were nervous, not lunatic, patients, and, therefore, not subject to the law. Evidence of their existence reached them in a variety of ways; and on such evidence, if sufficient, an application was made to the Lord Chancellor for a power to visit the house. The Commissioners, in 1862, had visited 161 single patients; but in 1884, they had visited 449, an increase in 20 years of 288. How many more there might be he could not say, so secret were they, and so scattered over the whole country. It had been asked in the House of Commons whether it were not true that many were sent abroad? On that point the Commissioners could give no information. Now, the state of these single patients demanded the utmost thought and attention. Care and inspection, it was true, had greatly mitigated their lot; but the peculiarity of the circumstances exposed them, on the slightest relaxation of vigilance, to a return of all the evils and oppressions of former days. The condition of these sufferers had, in former days, been most deplorable; their treatment might have varied according to the position and character of those who had

charge of them; but, in the great bulk of the cases, it was, beyond doubt, fearfully oppressive. He had it on the personal testimony of those who had endured the solitary incarceration. One lady asserted that she was frequently strapped down on her bed for 24 hours, while her nurse went out on a junket; a gentleman had assured him that he had endured the same, and showed the scars on his legs made by the cords wherewith he was confined. If visited, these poor people had then but small relief; they had none to bear witness to their testimony; and every statement they made was attributed by the attendant to mental wandering. Now, then, these patients were singularly unhappy; for, in houses where many patients were received, any one patient had the supporting evidence of his fellows; for, though the testimony of a patient in respect of himself was oftentimes very questionable, the testimony of patients in respect of others was very good, and had oftentimes been received in Courts of Justice. He had said more than once, and he repeated it, that were anyone of his own family visited by that sad affliction, he would infinitely prefer to consign him or her to a licensed establishment than to the care and treatment of a single custodian. Their Lordships would easily perceive that the temptations, the payments being oftentimes very high, and the facilities for long detention and delay of cure, must, under such a system, be very great. The last point on which the noble Earl opposite had commented was on the principle, character, and condition of private asylums, or, as they were properly denominated, licensed houses. The noble Earl had quoted some strong passages given in evidence by him (the Earl of Shaftesbury) before the Committee of the House of Commons in 1859. Now, he did not vary, in principle, one hair's breadth from what he stated at that period; and the noble Earl would have done well to have given his explanatory evidence in 1877. It was as follows:—

Your Lordship said, in answer to the honourable Member for Mid-Surrey, last Thursday, Question 11,449, that it was a notion prevailing in many minds that the principle of profit in regard to the treatment and maintenance of lunatics in private asylums should be eliminated.—Yes; it should be, if possible, no doubt. If I recollect the Question put to me by the Right Honourable Chairman, it was as to the establishment of hospitals, and I answered that I thought it would be a good principle to make the hospital system the basis of the system for the reception of patients of all kinds, but that I should be very sorry to do anything that should go to the total prohibition of licensed houses; because, though I believe the operation of the hospital system might probably tend very much to reduce the number of licensed houses, I had strong conviction that those that survived would be of the very highest character. It is absolutely necessary we should have some licensed houses, because many have a particular taste that way, and because there is a form of treatment there that you never could have in any public asylum. You say you are ready to admit it is a notion that prevails in the minds of a great many people, but the sooner that is eliminated the better?—Yes, no doubt. That idea has grown up from evidence given to the public mind, and not often from personal knowledge?—Yes; and I judge of it from

conversation, and from what I read, and what I hear. I know that that feeling does prevail in the public mind, and naturally enough. I do not blame the public for it; and, indeed, I very much praise the public jealously upon the subject. Perhaps your Lordship remembers the evidence you gave in 1859, in which you condemned the vicious principle of profit, as you called it, perhaps more strongly than anybody else?—Yes; I condemned it very strongly, and I condemn it nearly as strongly now; and, therefore, I want to put as great a limit upon it as I possibly can. Your Lordship has modified your views upon this subject?—Yes; to this extent—the licensed houses are in a far better condition than they were in every possible respect; but I have said, and I wish to repeat, that if we were to relax our vigilance the whole thing, in every form of establishment, would go back to its former level.

The Committee of 1878 had reported that the permitted continuance or discontinuance of licensed houses must be left to public opinion; and it was certainly remarkable that, though there were perpetual expressions of dislike and fear of such receptacles, no steps were ever taken, or even proposed, to provide substitutes. Since 1859, hospitals had not increased in number; two had been added; but that was only apparently so, those two having come into separate existence by disconnection from the asylums of Gloucester and Nottingham. Nevertheless, the feeling of the country would continue, he doubted not, to prevail in favour of the public principle, which, when established, would require, he could assure their Lordships, no small amount of care and supervision. In illustration of what he had said, he might put before their Lordships the present state of private and hospital accommodation. The licensed houses amounted, in all, to 97; 35 in the Metropolis, and 62 in the Provinces. The hospitals for lunatics proper were 13; for idiots, 2. The increase of licensed houses in the Metropolis since 1859 was 1; the decrease of provincial houses in same time, 15; but that might be accounted for by their greater size. The inmates in hospitals were 3,146; in licensed houses, 4,779; making a total of 7,925. Of that total, 1,398 were paupers, leaving thus, of paying patients, 6,527. He could not conclude without recalling their Lordships' attention to the vast, he might say the blessed, improvements, made in the custody and cure of the insane, an answer, in itself, to many reckless and ignorant charges. Let them only consider the present treatment of the pauper lunatic. They had often seen, no doubt, those palatial buildings, the public asylums, erected solely for the poor. Every mode of a physical or moral character was resorted to for the charge and cure of these unfortunate beings. Their diet, their apparel, their residential comforts, were of the best quality. Their amusements were not forgotten; and occupation, adapted to their line of life, was regarded as among the most remedial processes. The women were engaged in employments of all kinds suited to their sex, and agriculture was esteemed so beneficial to the men, that land to the extent of 200 or 300 acres was assigned to many of the provincial asylums. All was minutely and carefully visited by constituted

authorities, as he would show by the statement which followed. It exhibited not the maximum, but the minimum, of the visitations—

Public Asylums, County and Borough.	Two or more of Committee of Visitors. Two Commissioners in Lunacy.	Once at least every two months. Once a year at least.
Hospital.	Members of Committee of Management. Two Commissioners.	Various—according to Regulations approved by Secretary of State—generally once a month. Once a year at least. Twice of late years, by special Resolution of Board.
Private Provincial Licensed House.	Two Visitors at least, one to be Medical. One Visitor. Two Commissioners.	Four times a year. Twice a year ("Single Visits"). Twice a year.
Metropolitan Licensed House.	Two Professional Commissioners. Any one Commissioner.	Four times a year. Twice a year.

All this had been effected by degrees, by the results of observation, by the applications of experience. The contrast between 1828 and 1884 was well nigh incredible. All they required was care and caution, and that legislation should follow, and not precede, the guidance of practical science. But the appeal for such caution was met by hasty and nervous agitation. They had reason on their side, but it was encountered by nothing but expressions of fear. While of all the maladies that afflicted mankind, none were so intricate and appalling as those which disturbed his reasoning faculties, there were none upon which the public at large were more prompt to give an opinion, and enforce a remedy. He could only again and again implore the deepest and most serious consideration on such a subject. They were now in a far better state of hope for progress in scientific knowledge. A large Association of intelligent and right-hearted men had come into existence, formed of the superintendents of the great asylums and others who gave their time and their minds to that important study. They had their conferences, their meetings, their periodicals, and interchange of thought and inquiry. The services of these gentlemen were priceless—every day added something to the stock of facts, and on facts alone could treatment advance. He trusted that by investigation and patience they would be able, by God's blessing, to arrive at some alleviation, if not a full remedy, for the most mysterious affliction that had been permitted to fall on the human race.

Lord Coleridge pointed out that the resolution was of a somewhat

abstract character, and remarked that in that House, as elsewhere, debates on such resolutions were likely to be in some sense debates in the air. Nevertheless, because he had had a good deal of experience of cases connected with the subject, and very much also in consequence of the speech of the noble Earl who had just spoken, he would say a very few words. The resolution had reference not to the profoundly interesting question of lunacy itself, but simply to the practical administration of the laws affecting the detention of persons supposed to be lunatics. The system administered in this country owed its origin to the noble Earl who had last sat down, and it was difficult for anyone who had not arrived at his age to adequately comprehend the enormous improvement made by the measures of 1845 and 1853 in the system, if system it could be called, which was in existence before that time. For that great improvement he believed we were mainly indebted to the noble Earl opposite. But 1853 was more than 30 years ago, and it was no discredit to the noble Earl to say that the experience of 30 years might have taught us that in that system there was a good deal to be amended. In many cases the system, though excellent on paper, broke down in practice. In the great majority of cases it was absolutely clear to the intelligence of any ordinary person who was moderately acquainted with the matter that the individuals confined were insane; and in another large class of cases it was equally clear that the persons whom it was proposed to confine were not insane. It was on the dividing line that the real difficulty arose, and then the system, though excellent on paper, broke down. If we could, as in France, deal with a man's property by means of a family council, there would be very little to be said, but in this country no such system existed. For the reason that here it was a question of personal liberty, it was extremely important that care should be taken that the system by which persons were incarcerated should be watched with the severest jealousy. His noble friend had probably misunderstood the judgment of the learned Baron, who must have known that though a certificate was a defence to the keeper of the asylum, it was no protection to those who had set the doctors in motion. He had himself known of ten or a dozen cases at least where the system had broken down. In some of these cases persons who were not insane had been imprisoned, while in others insane persons had been so outrageously treated that juries would have been with difficulty prevented from giving verdicts against the persons who set the law in motion. He recollected that in a case that came before himself it was shown that a person had been committed to a private lunatic asylum on certificates of medical men who were interested in the asylum, and that, although the man had been afterwards formally discharged under their certificates, he had been re-arrested within ten minutes afterwards on others. He had no doubt that in that case, however, the person confined was a fit subject for confinement. The jury who had tried the case were naturally indignant with a state of the law which allowed such

proceedings. His experience with regard to private lunatic asylums had not been a happy one. It was unfortunately the case that medical men possessing the highest minds did not devote themselves to this particular class of disease, and, moreover, it was repugnant to such men to mix themselves up with a system which combined commerce and trade with their profession. In his opinion it should never be the interest of the keepers of private lunatic asylums to retard a cure (hear, hear). It was unfortunately the fact, as had been shown by the statistics referred to by the noble Earl, that the percentage of cures effected in the county lunatic asylums was far larger than that which was effected in private lunatic asylums. In the former it was clear that it was not the object of any one to retain a patient longer than was absolutely necessary, because the maintenance of such a patient was a matter of cost and not of profit, whereas in a private lunatic asylum the interest was the other way. He could only say that his experience led him to believe that it was unwise to hold out inducements to the keepers of private lunatic asylums to retain their patients as long as they could (hear, hear.) It had been said in reference to this class of disease that a medical man would have just as much reason to effect a cure speedily as in the case of any other class of disease ; but it must be remembered that the inducement was not the same, because such cases were not likely to be talked about among the friends of the patient.

The Lord Chancellor said that if he asked their Lordships not to agree with the motion of the noble Lord it was not because he thought that the Lunacy Laws were not capable of improvement or amendment, for such was not the opinion of the noble Earl at the head of the Lunacy Commission nor of those who had investigated the subject, but because he thought it would be very unwise on a subject of so much importance and difficulty to pass a resolution condemning too severely the existing system of the Lunacy Law as being eminently unsatisfactory. He fully admitted that there were many things in our Lunacy Law which were not as satisfactory as they might be, but he was sure that their Lordships would be most anxious to preserve an equally balanced mind in dealing with a subject of such difficulty and importance and not run the risk of defeating a salutary object for the sake of obviating conceivable and possible, but in his opinion highly theoretical, dangers. It must be remembered in the first place that the Lunacy Laws were meant for lunatics and not for sane people, and that they must be such as were calculated to deal wisely and properly with the lamentable fact that there were at all times a large number of persons requiring treatment for mental diseases. When the Commissioners made their report in 1878 there were over 66,000 lunatics, and it was probable that at the present time that number had increased. These unhappy persons must be dealt with, not only for their own sakes, but for the sake of the community at large—for their own sakes in order that they might be cured, and might not become

the prey of designing persons, and for the sake of the community that they might not, being at large, become dangerous to other persons as well as to themselves. In these circumstances, wise and proper laws, humanely administered, are necessary as safeguards by which the safety of lunatics and of the community at large could alone be secured. Looking to the result of every public investigation which this matter had received, and especially to the last careful examination in 1878, he thought it was too much to say that the proportion of cases in which there was any reason to suppose that abuses took place was infinitesimally small in comparison with the cases in which the present law had been properly administered. It had been said that there was too dangerous a facility for bringing persons into confinement as lunatics who might not be so, and that under the existing system, there was a temptation to persons who had an interest in doing so to retain them. There might be persons who wished to shut up their relatives without sufficient grounds for doing so, and such persons might be able to find two medical practitioners to assist them by giving certificates of lunacy. These were undoubtedly points requiring careful attention, and as to which every safeguard which did not go too far in the opposite direction ought to be adopted. It should be remembered that some of the cases which were investigated by the Lunacy Commissioners were absolute breaches of the law, and no system of law, however good, would prevent persons from committing a breach of it. It was worth while to consider whether it was not possible to amend the present law, and so diminish the probability of abuse in its administration, without throwing too great an impediment in the way of a proper administration of the legislation on the subject generally. The Commissioners, in their report of 1878, showed the system in operation in Scotland of what were called emergency certificates, and suggested an amendment in the law in that direction, and without binding himself to those suggestions in every detail, he thought that some amendment in that direction was worthy of consideration. In the meantime it must not be forgotten that there were checks and safeguards under the present system—medical certificates and visitations, both by the Lunacy Commissioners, and by Visitors appointed by the Court of Chancery, none of whom had personal or pecuniary interest in the cases which they had to visit and inquire into (hear, hear.) Careful reports were made, and in any case to which special attention was called these reports were inquired into. He thought everything that could possibly be done was done by the visits of the Commissioners and the Visitors. He had frequently seen letters from unfortunate patients, in which they stated their own views of their own cases; and he always desired, where the matter justified it, special reference to be made by the Visitors in such cases, and he was bound to say that the letters themselves contained, as a rule, internal evidence of some unsoundness of mind, and, in some cases, where they were not satisfied, further inquiry showed

that, although the unfortunate persons were capable of acting and writing like sane persons, yet, at other times, not only were they of unsound mind, but positively dangerous. With regard to private asylums, to which the noble Lord (Coleridge) referred in terms which he should not controvert, but which he could not corroborate, because he had little knowledge, still some of them, and not a few, were conducted by men of the highest character. He was sure the noble Lord must feel that the subject was one of the most difficult character. The decision at which the Committee of 1878 arrived was that the matter had better be left to the spontaneous action of the public. Some thought these private asylums should be immediately abolished, and others thought that they met an acknowledged want, and so forth. The matter was very much debated, and a Bill by Mr. Dillwyn was passed in the other House, but it failed to pass through their Lordships' House. Another member of the House of Commons moved a resolution that all lunatics should be brought under the care of the State, and that was rejected by a large majority. There were circumstances which could not be left out of consideration. Those lunatics who had considerable property were entitled to have their comfort provided for as far as possible. They must be put into the care of some persons, whether they kept licensed houses or not, to whom the expenditure must be entrusted. The inquiry which had been held by the Committee showed that no serious abuses existed, and he must say that their hearty thanks were due to the noble Earl (Shaftesbury), his colleagues, and also the Visitors, for their great labours (hear, hear). They provided the most effective safeguards that could be devised. He would not dwell on the safeguards, but he should undertake, on the part of the Government, if they continued to possess the confidence of Parliament, that in another session they would bring forward a Bill, of which the object would be to consolidate the existing law with such improvements as were recommended by the Committee of 1878, and others which might occur to them as advisable. He hoped, under the circumstances, the noble Earl would not divide the House on his motion.

The Marquis of Salisbury thought that, after the announcement just made, his noble friend would consider that the useful objects of his motion had been attained, and would not press it to a division. The debate to which the motion had given rise was of a very valuable character, and he did not think the existing Lunacy Laws would survive the blow they had received from the noble and learned Lord opposite. The subject was one which was extremely difficult, but he thought every one who had listened would agree that the securities for the liberty of the subject under the Lunacy Laws were very much less than were granted in every other part of the law of England. It was said that they must make lunacy laws for lunatics. That was all very well, but the very gist of the complaint was that occasionally sane people were detained. There were two classes of very obvious

motives. There were people who would want for their own motives to get rid of relatives whom they might find inconvenient, and whose property they might desire to secure. Motives of that kind were familiar in fiction, but he feared that they were not altogether strange in real life. On the other hand, there was a strong motive in the keeper of a private asylum to keep wealthy patients, showing a tendency to recover, on account of the rich harvest of profits. These were very great and strong influences. What facilities did the law give them? As far as the initial stages of confining lunatics were concerned, it seemed to him the law was no security (hear, hear). Any person, no matter how deep an interest he might have in shutting you up, had a right to take any two doctors he could find, no matter how obscure, and get an order to shut you up. Who could say there was any security in the initial stages? The whole defence of the present system lay in the inspection conducted by the Lunacy Commissioners, who had certainly acted with very great assiduity and success. He entirely agreed with the noble Earl as to the great debt of gratitude they all owed to the noble Earl the First Commissioner and those who worked with him—it was impossible to exaggerate the debt the country owed to him in his conduct of that difficult and thorny part of the law (hear, hear)—but the older guardians of English liberty would have been startled had they been told that a man's liberty was entirely dependent on the vigilance of a department. The great defect in the administration of these laws was the absence of publicity. If the doctor had to go before the magistrate, or the inspection of the Commissioners was so public that any one concerned could witness what was done, then there would be an adequate security for that liberty which now entirely rested upon the high administrative and moral qualities shown by his noble friend and his colleagues. Under these circumstances no one would say that the state of the law was satisfactory when that was the sole defence for its present state, and the motive for abusing the law was sometimes so strong. It might be said that if this publicity were insisted upon the necessary result would be that the feelings of families would in many cases lead to clandestine imprisonments taking place. He considered that the noble Earl had made out his case, and shown that the state of the law was not satisfactory. On the other hand, after his noble friend's declaration that legislation would be proposed by the Government, he thought the motion might properly be withdrawn (hear, hear).

After a few words from Lord Stanley of Alderley,

The Earl of Milltown, in view of the proposal of the Government to introduce legislation at a future date, agreed to withdraw his motion. His object had been more than gained by the discussion that had taken place and by the promise he had obtained from the Government. He was still of opinion that the arguments in favour of his motion were unanswerable.

The motion was then withdrawn.

The above is a fair specimen of the discussions which from time to time arise in Parliament and the country with reference to this vexed question.

Public servants of whatever class ought not to object to reasonable criticism upon their acts, and the members of the medical profession practising our speciality are, we believe, no more thin-skinned than the members of other professions, or other members of our own. But we certainly think we have a right to ask that we may be generally credited with ordinary honesty and integrity such as would be presumed to belong to persons to whom the most important interests are entrusted in other departments of our profession, in relation to the treatment of patients, the care of the public health, and the discharge of medico-social and medico-political duties.

Upon many occasions on which the honour of our profession, in its relation to the subject of insanity, has been called in question, we have had an earnest and powerful advocate in Lord Shaftesbury, as upon this occasion; and we desire to express to him, on behalf of the Association which this Journal represents, and of the members of our profession who are engaged in the practice of lunacy, our grateful acknowledgement of his kind, and intelligent advocacy.

The public interest has been largely excited, and the preceding observations have some of them received a remarkable illustration by recent proceedings in the Law Courts. These proceedings and their results show conclusively how widely even skilled opinions may differ on questions of lunacy-law interpretation, and how a great need consequently exists for at least such codification and explanation of the existing statutes as shall enable those who are bound by, and have to act under, them to keep themselves well within the lines of legality and safety. They certainly also accentuate, in a very unmistakable manner the dangers and liabilities under which certifying medical men perform functions which are imposed upon them by the public, practically without their having any power of repudiation or means of protection.

It may be that the evidence produced at the recent trials showed that there had been a less strict compliance with the provisions of the law than there should have been, or there may be other deductions to be drawn from it. But the result certainly seems to have demonstrated the necessity of a demand being made by the medical profession generally, either that the duty of signing certificates of insanity shall be taken from them and transferred to other hands, or that they

shall, in some way, be secured against the vexation and pecuniary loss to which anyone who has been certified as insane has now the power to expose them.

The public exclaims against the monopoly of the medical profession to confine lunatics; the medical profession should surely now resist that which the public has forced upon them, their monopoly to endure persecution and suffer loss for the discharge of a public duty.

It may be in the interest of the public that future certification should be entrusted to specific public functionaries properly qualified, and duly protected. It cannot fail to be of vital importance to medical men that immediate steps be taken to relieve them from duties which they have not solicited, with their discharge of which the public are evidently not satisfied, and which are at all times attended by unpleasantness, and the evidently not remote possibility of serious pecuniary loss.

Weldon v. Semple.

One chief feature in this case is the opposite opinion formed by two judges as to the law of lunacy, and we are inclined to think that, with all its faults—we had almost said follies—the trial of Weldon v. Winslow was more according to law than was the one of Weldon v. Semple. Both judges seem to have agreed in thinking there was something "shocking" in lunacy proceedings, and that there was necessity for immediate change in the laws regulating detention of persons of unsound mind. Everything in the lunacy world indicates unrest and unstable equilibrium, and we only hope that legislation will not follow in a panic.

The present legislation is the result of much care and experience, and, if not the best possible, is far better than what would follow hasty radical measures. Of one thing we are sure, and that is that troublous times are before those entrusted with the care of the insane. Already we know of several threatened proceedings by former patients. From experience we know that there are certain very dangerous patients, who have a craving for legal proceedings, and who really believe themselves to be persecuted or injured by unjust detention. Some of these are to the manner born, and come of nervous, unstable parents; others are discontented in consequence of imperfect recovery, repeated attacks of insanity, or because the form of the insanity was marked by querulous

discontent; many alcoholics belong to this last class. Such litigious lunatics have been long recognised, though not sufficiently described.

Besides the persons who are of markedly unsound mind, there are others in whom eccentricity approaches insanity so closely that even experts may be misled, and it is with these cases that the more danger occurs. The public and judges themselves look with very different eyes upon such cases when they are related to themselves from what they do when they have to decide in a question of liberty or freedom. Sanity or insanity is not considered then, but only whether a certain unfortunate person should practically be confined for life. There are many persons who are sources of endless family trouble, and even disgrace, who are recognised by their friends to be odd or insane, but who are so acute that it were dangerous for any physician to attempt to state in a certificate the grounds for his belief in their insanity. These cases, we fear, must at present be accepted as part of the cross which has to be borne by their relations, and must not be sent to asylums or restrained in their actions.

It is to be remembered that most of these cases can be steered by judicious management, and also that their peculiarities are so much part of themselves that to send them to an asylum is to condemn them to lifelong confinement—a most serious step to take.

Without in any way assuming that Mrs. Weldon belongs to this class, or to any class of mental unsoundness, the present series of prosecutions naturally calls our attention to the dangers involved in certifying to the mental state of any patient.

In the case under consideration at present we feel it our duty only to point out what is known of the proceedings, and to leave the issues of facts untouched.

The case may be well considered from different points of view. First, let us suppose that a gentleman of position has a wife who develops strange ideas, and who, in consequence of these ideas, ceases to perform her duties as a wife, and causes anxiety not only to her husband, but to her own relations. Later, if this person develops symptoms which, though not necessarily evidence of insanity, are more commonly present with mental unsoundness than with sanity, it is not to be wondered at that the husband should consult some specialist whose name is well known, and that he should suggest that consultations should be arranged by this specialist

to determine the nature of the disorder and the best way of treating it. A consultation takes place, and the specialist advises that a certain course should be followed; the husband, ignorant of the method to be followed, asks the consultant if he will arrange the matter, and follow the treatment which is most suitable to the cure of the patient. It is not astonishing that the consultant should refer to medical men whom he knows, and to whom he has referred other cases. All consultants must know the difficulty there may be to get certificates signed even for lunatics who are raving, and we fear this danger will be increased by the present trials.

The medical men are informed of some of the particulars of the case, and attempt to visit the patient; but difficulties arise, and subterfuges have to be made use of to obtain an interview. We personally object to any doctor disguising himself or his profession in examining cases, but we all know that stratagem is needed in some cases, and even Baron Huddleston contended that a doctor might disguise himself to obtain an interview. All this being done, two doctors go together to see the patient, provided they do of themselves, and apart, obtain facts indicating insanity, and it seems quite a new reading of the lunacy law to insist on the doctors never having seen the patient together.

The doctors having obtained facts satisfying themselves of the insanity of the patient hitherto, have not been expected to call together all possible evidence in support of their judgment, or else every certificate would involve days of questioning. It seems to us most anomalous that on the one hand the doctor is expected to form an independent judgment, and yet he is to get all the collateral evidence as well.

The above may be said to be one side of the question. The other is that a husband, being tired of a wife of strong will and definite purpose who renders his life uneasy, determines to get rid of the bother by putting her into an asylum. He calls in a specialist who has an asylum and offers him liberal terms to get her out of the way; the latter takes the job, calls in his friends to assist him, primes them with statements which are perversions or exaggerations of fact, and they, willing to serve him, go through a form of examination, acting up merely to the letter, not the spirit of the law, and thus place the patient under certificates.

We ourselves do not believe that the latter is at all a likely thing to happen.

There is yet another way of looking at the matter, which is

that misrepresentation of facts by friends may lead a doctor to believe that a peculiar person will be benefited by temporary seclusion under his care; and other doctors, who know and believe in his judgment, may too readily accept the facts which are told them, and see and hear everything with a strong bias. In this last case no bad faith or evil intention exists on any side, and the most that can be said is that carelessness was present. Each person who has followed the trial must have been struck by the very strong opinion formed by the judges. It is to be regretted that men of sound judgment should be ready to accept the charges against doctors, and this makes one anxious to know why the evidence of medical men should be so mistrusted.

The lessons to be learnt are that even greater dangers arise to the proprietors of private asylums than was suspected, and that a very strong feeling is abroad against the maintenance of institutions for the detention of lunatics in which there is a strong inducement to keep patients who might be at large. We ourselves accept the evidence brought before the Parliamentary Committee showing that no cases of undue or unjust detention in these asylums could be discovered. The principle is one which seems to be dangerous, but the difficulty is great when we want to provide a remedy, and we believe there will be a reaction when some judge or politician has been killed by a lunatic who was too cunning to be certified.

Private asylums are not the only ones interested in paying patients; a superintendent of a paying hospital feels the effect of the loss of highly paying patients in his annual returns, and the doctor with one patient cannot be always content at the prospect of losing the person who pays his rent.

As to the signing of certificates, we regret to find that many men whose judgment is of the soundest refuse to run the risk involved in signing a certificate. We do not believe that any plan for signing on oath will be of any service, and the attempt to have magisterial sanction or authority will delay the treatment of many cases till the time for cure is past.

It has always seemed an anomaly that in all other diseases the treatment is decided upon after consultation by two or more medical men, but in lunacy independent judgment is considered best. Who has not met with dangerous lunatics who might be interviewed for an hour without their delusions

being detected, unless a hint were given by the family doctor? Then all is cleared up and the certificate signed.

Lunacy law will be amended, or probably re-made, and the foundations will be laid at the cost of some martyrs.

PART II.—REVIEWS.

Outlines of Psychology, with Special Reference to the Theory of Education. By JAMES SULLY, M.A. London: Longmans, Green and Co. 1884.

A work by Mr. Sully bearing this title is sure to interest medical men whose practice is concerned chiefly with the psychical manifestations of disease. However skilful a man may be as a physician, he can scarcely fail to increase his success in dealing with the insane when to his knowledge of medicine he adds knowledge of the laws that govern mental phenomena. It might be added that such knowledge will not merely improve his professional insight; it will quicken his perception and aid his judgment as a man of the world; leading to facility in tracing motives, in analysing character, and in influencing the conduct of others.

The present volume is designed for the general reader as well as for the student. Its main object is to present the leading facts of the science of mind, and to point out the practical application of them. In working out this object the author entirely avoids questions in metaphysics. Mr. Sully's point of view is that of the Association School of Psychology as modified, or rather expanded, by the doctrine of evolution.

As an exposition of the present state of psychology the book may be said to carry out its intention satisfactorily. Without presenting anything striking either in the way of fresh analysis or in the manner of setting out the facts, it may be said to exhibit succinctly the current views of the Association School though it may be doubted whether a reader would carry away with him as clear and definite a grasp of the subject as he would from Bain's "Compendium of Mental Science." This comparative inferiority is probably due to the fact that Mr. Sully is somewhat sparing in concrete examples to illustrate general statements. For this reason, though the style is clear and the meaning is never uncertain, the various laws of mind are hardly realized in all their bearings and in full force.

The usual threefold division of mind into Feeling, Knowing, and Willing, serves as the basis of description; and a glance at any peculiarities in Mr. Sully's treatment will afford an insight into the nature and method of the book.

The fundamental attributes of the intellectual operations are resolved into Assimilation and Discrimination. Another property of intellect, according to Prof. Bain, is Retentiveness. All knowledge clearly implies the capability of retaining, recalling, or reproducing past impressions. But retentiveness occupies a different place in knowing from that of discrimination, &c. It is rather a condition of knowing, of coming to know, than a part of the active knowing process itself. Besides, as we shall see later, it is the principle which underlies the growth or development of intellect, and not only of this, but of mind as a whole." Now, although growth in any department of mind requires memory, it is not the less true that Emotion and Will embrace an intellectual element in so far as they are marked by recoverability. In other words, retentiveness stamps on any quality of mind an intellectual phase. The highly retentive senses, Sight and Hearing, are more intellectual than the less retentive, Taste and Smell. Action is intellectual in proportion as it is guided by memory rather than by present feeling. Hence it does not seem altogether accurate to remove retentiveness from the sphere of intellect, and to make it merely a general condition of mental development.

Mr. Sully's view of memory does not make his treatment of it any the less interesting. Under the head of Reproductive Imagination (Memory), the conditions of reproduction and the laws of association are stated. Facility in recollection, apart from original endowment, depends upon depth of impression and association of impression. Depth of impression is due to attention springing from emotion or other source, and to repetition. Association of impression includes the various modes ordinarily recognized—Contiguity and Similarity with their composites. The training of the memory affords occasion for some useful observations. A note of warning is also raised against the undue exaltation of memory. "It cannot too clearly be borne in mind that to acquire any amount of knowledge respecting the particular and concrete is not to be educated. Perfect knowledge implies the taking up of the particular or concrete into the general, the connecting of a variety of particulars under a universal principle. It follows that memory may be over-stimulated. A certain knowledge of

the concrete, a certain store of images, is undoubtedly necessary to the exercise of the higher intellectual faculties; but if the teacher aims simply at mass or volume of details, the higher powers of the mind will be unexercised. Such a course would involve *growth*, or bare increase in the bulk of mind, but not *development*."

Belief is regarded as "a perfectly simple mental state, having a unique character of its own." Though "it has a certain emotional complexion," and though there is "a close relation between" it "and activity," it is essentially intellectual in nature. Thus, though "closely related to other mental states, it cannot be analysed into these." This can scarcely be considered a full account of the nature of belief. Some justification is surely required to regard as simple a mental state presenting so strongly the appearance of compositeness, and which by different psychologists has been relegated to each of the different departments of mind, Emotion, Intellect, and Will.

The emotions are classed in three groups or orders, "constituting successive stages in the progress of emotional life. First of all come what may be called the Individual or Personal Emotions." "In the second place we have the Smypathetic Feelings. By these are meant participations in others' pleasurable and painful experiences, and kindliness or benevolence of disposition generally. These are purely representative feelings. In sympathy or fellow-feeling we have to imagine or represent how another feels. And the sympathetic feelings follow the personal feelings, because they pre-suppose some amount of 'first hand' emotional experience. They are non-personal and common as distinguished from the individual and personal feelings." "In the third place we have a group of highly complex feelings know as Sentiments, such as patriotism, the feeling for nature, for humanity. These are commonly brought under three heads, the Intellectual Sentiment, or the attachment to Truth, the Æsthetic Sentiment, or admiration of the Beautiful, and the Moral Sentiment, or reverence for Duty (including the worship of moral excellence and the feeling for humanity). These emotions in their developed form attach themselves to certain qualities in things or abstract ideas, truth, beauty, moral goodness. They involve a higher form of representativeness than direct sympathy. They depend to a considerable extent on sympathy, and may be said always to involve it in an indirect form. Hence they follow it in the order of development. They are essentially

non-personal and common emotions." In the further exposition of the feelings there is little of note.

In his account of the Will, Mr. Sully follows the current views of the Association Psychology. The old controversy of the freedom of the will is disposed of in a few paragraphs. In effect, the solution is the one that has found favour with men of science since the days of Locke. We may properly speak of the freedom of the man, but not of the freedom of the will.

To the medical man engaged in psychiatric practice the discipline of the will is a problem of fundamental interest. Touching the limits of punishment, Mr. Sully says:—"All punishment is suffering, and as such, an evil. More than this, it seems to estrange educator and child rather than bring them together. Finally, it is repressive, checking and arresting, instead of evoking activity. Hence it can only be inflicted when necessary either for the good of the offender himself or by way of example and warning to others. Vindictive punishment, blows and harsh words administered in temper, and as a relief to feelings of annoyance, check the will without disciplining it. Punishment cannot be justified except in cases where it is likely to be effective as a deterrent. Thus it ought never to be inflicted where it is likely to be inoperative through feebleness of will. Children have only a certain power of self-restraint, and of anticipating consequences. Hence, to punish them for actions lying beyond their control, as for example crying, may be pure cruelty. Again, it is inhuman to punish a child for actions which are in no sense wrong. Trifling faults, such as obstreperousness in an active boy, are not meet subjects for punishments. Great care should be taken before punishing a child for an action to see that there has been an evil intention. Thus it would be immoral to punish a boy severely for breaking a vase the value of which he could not be supposed to know. Also the motive must be taken into account. Thus a child who plucks a flower in the garden in order to give pleasure to a sick brother or sister ought not to be punished." On the other hand, "If it does not supply a sufficient force, it is useless. Weak, indulgent parents, adverse to severe punishment are often unkind in the worst sense by administering slight punishments, which are wholly inadequate, and so of no good to the child." The insane are often said to resemble children. The likeness holds good in many respects; but in an essential point it breaks down. The character of the child is plastic; the character of the insane has to a large extent hardened in its mould. On this ground it is that the

punishment of the insane is objected to. To say that an insane person should not be punished for a crime, because he "could not help it," is simply to betray confusion of thought, or to accept a doctrine that, rigidly applied, would render punishment in any case indefensible. The object of punishment is to modify character, to add a new force to the abiding springs of conduct. The possibility of carrying out this object is the one thing to determine in considering a question that cannot yet be regarded as definitely settled—Whether in any case it is right to punish the insane. No matter how numerous may be those who say that an insane person should never be punished, and no matter with what heat of passion they uphold their view, the question cannot be regarded as settled so long as clearly-thinking, humane men, with competent knowledge, hold the opposite opinion. The subject is, however, a large one, and would repay with interest a thorough-going discussion.

A feature of great value in Mr. Sully's book is the copiousness of bibliographical reference. At the end of each chapter is a list of writings on the subject dealt with.

The work is a good one for those who, having no previous acquaintance with the subject, desire to be put in possession of the main facts of psychology. Notes on the training of the various qualities of mind render the book specially interesting to persons concerned in education.

W. R. H.

The Pedigree of Disease. By JONATHAN HUTCHINSON, F.R.S. J. and A. Churchill, 1884.

(*Continued from page* 292.)

That the argument may not be a broken one, it is necessary that we should very briefly re-state the results obtained in the first part of our review of Mr. Hutchinson's book. A very few words will suffice. The subjects under consideration were Temperament and Diathesis. These were, in the first place, defined, in the next, contrasted; and here it will be remembered that Temperament applied to the organism in Health, Diathesis to the same in Disease. From this we passed to a discussion of the criteria of Temperament, which ended in the conclusion that, though the data available were most scanty, though these scanty data were most unreliable, yet that temperament was not a *feu follet*, but a searchable something, and accordingly to be sought. This brought the first part to a close.

We now have to pass on to consider another of the vague bequests of the past—Idiosyncrasy. Concerning this, Mr. Hutchinson insists, and very truly, that the word is intended to indicate our ignorance of causes, not our disbelief in them. Idiosyncrasy signifies to us a behaviour of the organism for which we cannot account—for which no knowledge we may possess concerning the organism gives us warrant. What we are pleased to term individuality is a fact of the same class, but of a lower order, for idiosyncrasy is "individuality run mad;" this definition can scarcely be improved on.

Looked at thus, the question which next arises is—under which heading shall we place Idiosyncrasy—under Temperament or Diathesis? On this point, we think the reader would be somewhat confused as to the answer the author intends to give, for on page 24 we read—"Idiosyncrasy is, indeed, to a large extent, nothing but *diathesis brought to a point;*" whilst further on, bottom of p. 25, we read—"We have defined idiosyncrasy to be a peculiarity of the individual, usually a rare and exceptional one, *which does not necessarily entail any degree of proclivity to disease. . . . . . .*" By the first of these statements we are led in the direction of Diathesis, by the second in that of Temperament. If we halt midway, we may take this comfort to ourselves that had we followed either indication we should have attained only to a partial truth. Let us examine the question a little more closely; and first in the direction of Diathesis. Imagine a family with a well-marked pathological tendency—say in the direction of phthisis—hospital and general practice will tell us every day concerning such that this tendency will be manifested by the different members of the family in very varying degree; in some it will be possible, by careful treatment, to keep in abeyance the tendency; in others, treatment may fail to do so, but may yet prove a powerful factor in modifying the course of the disease; whilst in one, perhaps, we may find that, despite the most careful preventive treatment, the disease arises, and then, apparently without the smallest regard for curative or palliative means, runs an uninterrupted and rapid course. Clearly here we have "diathesis brought to a point," in this one member the pathological tendency culminates. Why—we do not know. Let us now look at the question from another standpoint, and suppose, *e.g.*, that a capacity for work marks a family, this we know to be the case not uncommonly. Whilst then the family, as a whole, is known by this quality, energy, we shall perhaps find

that, in one particular member this same quality will manifest itself in a most unusual degree, in the performance, viz., of an almost incredible amount of work on very possibly a spare diet and a seemingly inadequate allowance of sleep. Again, we have individuality "running mad," if you like, but in the direction of temperament this time, for surely none would dream of classing, as pathological, capacity for work. We are looking, in fact, at "a fundamental mode of activity of the organism." Again, we could hardly class as indicative of a pathological tendency, the fact that one organism will react to a very minute dose of atropine, whilst another will show an unusual insensibility to the same drug. There is no pathological tendency here—nothing, indeed, "but a fundamental mode of activity."

Clearly, then, it would seem that individuality may signalize itself both in health and disease, and therefore that idiosyncrasy is not only Diathesis, but also Temperament brought to a point.

We may here remark incidentally that the fact of our employment of such a word as idiosyncrasy is significant of scientific degradation. If we search the exacter sciences—mathematics, physics, even chemistry, we search in vain for such a term; yet we might, if we so willed, use the term even in these—as, for instance, in the case of a number of balances, some of which we discovered would turn to a milligramme, others not to a centigramme. Here is idiosyncrasy, but the physicist is content to say that one is more sensitive than the other, fully satisfied that, if he investigate, the reason will be forthcoming in a greater nicety of finish of the fulcrum, or in a higher or lower pitching of the centre of gravity of the beam of the balance. Nothing whatever would have been gained by the use here of the word idiosyncrasy, just as *we* gain nothing by it. It is, indeed, we think, a very useless term. Let us not be misunderstood, the word idiosyncrasy is not meaningless—on the contrary, it means something very definitely, only it is useless, because we already possess words capable of expressing that meaning. It may be argued that the word avoids periphrasis; but even admitting this, it may be questioned whether the disadvantage of a periphrase is not more than counterbalanced by the objections to the multiplication of terms.

Leaving this, we have next to consider a very important subject. Accepting the term idiosyncrasy, as we must here, we find the statement, p. 25, "that they (the idiosyncrasies) depend upon structural peculiarities, we can not doubt, though we may be quite unable to demonstrate their physical cause."

Here, surely, is an article of faith on which Pathology must stand or fall; to this we must all give in an absolute adhesion —we shall see, later on what adhesion to this statement involves. Mr. Hutchinson next advances to the further point, that not only must functional idiosyncrasy involve structural idiosyncrasy, and *vice-versâ*, but that structural idiosyncrasy may be the only fact which may strike us, *i.e.*, the functional peculiarity entailed may be quite subordinate or altogether escape notice. As examples of such structural idiosyncrasy, we find instanced—coloboma, retention of their sheaths by the retinal nerve-fibres, clefts in the eyelids, absence of levator palpebræ, hare-lip, etc. We think this part of the book particularly valuable, enforcing, as it does, the doctrine that functional peculiarity involves structural peculiarity; for, knowing that the structural peculiarities above recorded must entail corresponding peculiarities of function, and yet that these latter are not apparent, we shall, with this before us, find it the less difficult to grasp the teaching that abnormal function will also involve abnormal structure, though the latter be not apparent.

The above instances of structural idiosyncrasy do not involve any definite pathological tendencies. They remain stationary as fundamental modes of structure—the counterpart of temperament; but we may find structures showing peculiar and definite departures from the normal—which departures we must class as morbid—and then our structural idiosyncrasy associates itself with diathesis. This diathetic form Mr. Hutchinson illustrates by certain skin diseases, *e.g.*, by molluscum fibrosum, xanthelasma, psoriasis, and others; and in concluding this part he points out that it is not very far from the position thus reached to the consideration of the development of morbid growths in general as indicative of local morbid proclivities of certain tissues. Should we be very much further on our way if we granted this? That is a question we are not desirous of entertaining, but we think that we are the further for this juxtaposition of structure and function which the employment of the term *structural idiosyncrasy* effects. It is hardly possible to ring the changes too often on these points, for—to alter an old saying :—"What the eye doth not perceive, the mind doth not believe." Let us see how this applies. Take the doctrine of Heredity in insanity: is it not held by many authorities in this domain that this is not proven, *i.e.*, that the evidence is not such as to exclude simple coincidence on the laws of probability? Admitted, but none the less can you doubt the doctrine of Heredity here! To answer this we

may observe that it is not hard to trace in the resultant of two forces the likeness to its parents; but multiply the forces, not fiftyfold, but a thousandfold, and then seek in the resultant the resemblance to any one of its parent components. What will be the result? You may then not only not see a likeness, but you may see apparent unlikeness; and yet would any physicist in the world deny that this same resultant bore the traces of the component we were seeking? Can we not even go further, and ask the question, if theoretically one could deny the possibility of a resolution of the resultant into its constituent components, and then behold the likeness sought! As well, indeed, might you deny that the projection of a given flake of foam was the offspring of and *resembled* its countless parent forces, on the grounds that you could not prove it, could not eliminate chance, as deny in things mental that cast of thought in the parent will be projected into the psychosis of the child, and be there for him who knows how to look for it. Anything short of this belief shakes at the foundations of a structural psychic pathology, and it is well that we should recognize this. It is, it must be confessed, a praiseworthy condition of mind which avoids giving facile credence to doctrine, and demands demonstration, but it is doubtful wisdom which, on the grounds of negative, not positive evidence, discredits a principle.

Our task is nearly finished, for it would not be in place here to follow Mr. Hutchinson in detail. The broad lines of the argument of the book are throughout amply illustrated by examples; thus, Idiosyncrasy is considered in reference to diet, to drugs, to the poison of specific fevers, to local irritants; and under each of these headings we find most valuable material, much of which is the result of, or is enforced by, the author's own most careful observation. Diathesis finds similar extensive exemplification, which, however, does not call for criticism here. If, in taking leave, we may be allowed a Parthian shaft, we would draw attention to a statement on page 71. We are there asked to accept as a definition of diathesis "that it is *any condition of prolonged peculiarity of health giving proclivity to definite forms of disease.*" This definition we think not very happy in its wording, for surely the conditions under which health should give proclivity to disease would cease to be health. It would not have been needful to draw attention to this, which may be but a slip on the part of the author, if it be not on the part of our understanding, but that it seems to us most essential to be very clear on these points of definition, and here to recog-

nize concerning diathesis that entering on this we take leave of health, and find ourselves in the domain of the morbid—Temperament taking account of all conditions on this side of disease.

It is impossible to conclude without expressing to the author of the "Pedigree of Disease" our gratitude for having again brought into prominence problems so important. It is needless to say that the subject is ably handled; this could not be otherwise by so accurate an observer and so careful a thinker. But Mr. Hutchinson has other qualifications more especially his own, viz., a most exceptionally wide range of observation and large store of accumulated facts; these it is which fit him as very few others to treat of subjects of the nature of those dealt with here. If the result of his labours are not very definite, let us remember that the best minds of the past have been engaged in the attempt to master the difficulties besetting the consideration of Temperament, Diathesis, Idiosyncrasy, and have not been more successful. To Mr. Hutchinson has belonged the task of showing us what we ought to know and do not know, and of pointing out to us the direction in which we should search.

Need we again apologise for criticizing this book here—surely not. Had we examined evidence in detail, this might have been called for, but we have limited ourselves to the consideration of points of doctrine, and these concern every element of the body, not omitting those serried ranks of cells of the cortex cerebri, of which Physiologists count up five layers! It is here more particularly that Idiosyncrasy finds a home, and here more particularly that we are called upon to believe that underlying the eccentric behaviour is corresponding eccentricity of structure. Should doubts arise, let us quell them as unworthy, and following the wise example of Sir Thomas Browne, in relation to other subjects it is true, never allow such doubts stretch the Pia Mater of our brains.

H. S.

The Law of Sex: being an Exposition of the Natural Law by which the Sex of Offspring is Controlled in Man and the Lower Animals. By George B. Starkweather, F.R.G.S.

The subject of this volume is one of great interest. If it can be shown that the determination of sex is amenable to control, a potent spring of disappointment and of domestic unhappiness would be dried at its source.

The book is a large octavo of 276 pages, and has an appendix with 40 illustrative portraits. We will give here a concise view of the contents, and then add one or two critical remarks.

The author claims "to make known a new discovery of a great law of Nature; nothing less than the law which governs the sexes, and whereby the sex of offspring can be controlled." The first third of the book may be said to clear the ground. The problem is stated, facts requiring explanation are set forth; and the insufficiency of previous theories is shown. The second third states the law and the grounds on which it is based. The remaining portion of the volume is devoted to practical applications and specific directions.

Of the preparatory matter, the only portions calling for notice are of previous theories of sex. Of these two may be mentioned; Dr Napheys' modification of the Ovularian theory, holds that the sex is determined in the ovum independently of the male or fertilising element, that the ovum goes through two distinct stages of imperfect and complete development; and that females are the result of a union early in the period of heat, males of a union towards the close of heat. The evidence for this theory and the evidence against it, as presented by Mr Starkweather, balance each other. Another doctrine, of more respectable antiquity, has numbered many illustrious men amongst its champions. It holds that the sex of the offspring is determined by (1) the Comparative Vigour; (2) the Relative Age; and (3) the Nutrition of the Parents: the offspring following the sex of the parent that stands highest in these qualities. A large amount of positive evidence supports this view; but there are also facts unexplained by it, and facts that contradict it. The author's own theory is the only one that explains all facts and that accords with universal experience.

We now come to Mr Starkweather's exposition of his own Law of Sex: that "*Sex is determined by what I shall designate as the 'superior parent;' also that the 'superior' parent produces the opposite sex.*" "'Superiority,' then—which must be understood as a fuller and higher development of organization—is what determines sex." "*Cerebral development* is the key to '*superiority.*'" Three qualities of cerebrum have to be taken into account: the quantity; the quality; and the activity. "*Activity* is the principal consideration in determining 'superiority;'" and its phases, whether physical or mental for example, and its relation to inactivity must be carefully noted. "*The head* is an epitome

of the individual." The nose is the chief indicator of activity. A long nose and marked features indicate "superiority." "A *drooping eyelid* is an invariable sign of 'inferiority.'"

"Seniority in age is usually an element of 'inferiority'—and, other things being equal, the younger parent will assuredly be the 'superior,' and will therefore produce the opposite sex in the offspring." "In no given case can they (the sexes) be equivalents absolutely, or a hermaphrodite would result."

The forty illustrative portraits are used to typify comparative superiority and inferiority, and to forecast the proportion of boys and girls that would result from the union of such persons—if they should have children. It is not stated whether the portraits are fictitious, or are intended to represent real persons. They are probably fictitious. So much for the statement of the law. The verifications follow. Striking exemplifications are related. Seeming contradictions are brought forward and explained or reconciled. Mr Starkweather says, "I could not rest satisfied until able to tell approximately, upon seeing any couple, the proportion of the sexes of their children, and the *probabilities* when seeing but one of the parents. And this power I have now enjoyed for some years."

The practical application of the law is the control of the sex. "How far can this theory be made to apply where the parents are already married? In other words, how far is it possible for parents to decide the sex of their future offspring? To those questions I reply, briefly, but confidently, that in the vast majority of cases it is quite possible." Specific instructions are given for the production of each sex; the object underlying the directions, being—if the husband and wife do not already hold the requisite relative superiority and inferiority for the desired sex—to convert the "inferior" into the "superior" parent. To ensure a daughter the husband, to ensure a son the wife, must go into training. Persons interested in the subject, however, will do well to consult the book for more precise information, lest they should find too late, that they have trained on erroneous principles, or in the wrong direction. According to the theory advocated, "public opinion would soon be formed, under the power of which it would be a social disgrace to a man to have only sons, while a stigma would attach to all families exclusively of one sex."

Mr. Starkweather might complain that an outline so bald as that given here only does injustice to his theory, through the

inevitable suppression of many facts in corroboration. It must of course be confessed that such a charge would have some foundation. The same effect cannot be produced by the mere heads of arguments as is produced by the detailed reasonings. So much may be admitted. But a countervailing advantage balances this defect, the weak points do not stand so clearly exposed.

Whether the doctrine in question, the Law of Sex, as expounded by Mr. Starkweather, is true wholly or in part, is outside our province to discuss. That question must be decided by the unbiassed investigation of a very wide range of facts. The point here is a narrower issue. It is simply this, how far does the evidence put before us warrant the conclusion drawn from it? In other words, how far are the "proofs" satisfactory?

It is clearly impossible to examine the facts in detail. Space requires the broad surface of criticism to be ground to an edge.

The first remark is that throughout the book there is no evidence of a mind trained to scientific investigations, or to consider beforehand the requirements of proof.

The second criticism is that the vagueness of "superiority" and "inferiority," and the dependence of these qualities upon a number of circumstances beyond the reach of calculation always leave an open door of escape to the erring prognosticator of sex. To bring to book and convict the professed phrenologist or the skilled weather-prophet (skilled, that is, in vague language) is well-nigh impossible. To prove the baby-prophet wrong, in theory at least, would be not less difficult.

A third fault (if it be a fault) is akin to the weakness of Jonah's prophecy. The doctrine is suicidal; it works out its own defeat. Mr. Starkweather claims for his theory that it affords alike the power of prevision and the power of controlling sex *at will*. Prevision might formerly have been possible to those acquainted with the "Law." But now that Mr. Starkweather's information has been published to the world, a higher endowment of the race will be required to discern the learnings of the added element of will.

In conclusion, it may be remarked, that at best the "Law of Sex" is only an empirical generalization as yet not resolvable into the laws on which it depends. Even as such, if true, it has great value. Probably it does contain a substratum of truth; and, if so, the subject would repay the work of a competent investigator.

W. R. H.

Sur la Théorie de la Paralysie Générale : de la Folie Paralytique et de la Démnce Paralytique Considérées comme deux Maladies Distinctes. Par le Dr. A. BAILLARGER. Paris : 1883. 8vo., pp. 117.

The views defended in this pamphlet have long been entertained by M. Baillarger. In 1858 he sought to prove that in the maniacal stage of general paralysis two morbid conditions co-exist, one permanent and incurable, which he termed "paralytic dementia," the other transitory and accessory, which he described as "congestive mania." This opinion was fully discussed at the time in France, but did not meet with general acceptance. He now so far modifies it as to give the name of "folie paralytique" to what he previously called "congestive mania." He shows that "paralytic dementia" may run its full course without any maniacal symptoms whatever; and, further, that a maniacal condition, closely resembling that of general paralysis, may occur in various other disorders, such as alcoholism, locomotor ataxia, &c. He admits, indeed, that this "folie paralytique" is much more frequently connected with general paralysis than with any other affection, so that its presence should always make us suspect that disease. Probably, with this qualification, these two statements will be denied by no one; and the question then becomes one of terminology and description rather than of fact. M. Baillarger's scheme has, no doubt, the advantage of bringing into prominence the presence of a delirium, like that of general paralysis in other diseases, and so, perhaps, of enabling us to trace the connection between this particular symptom and the state of the nervous system of which it is the evidence. Its disadvantage, which much outweighs this, as it seems to me, is that it breaks up what is obviously a single anatomical and clinical process into two, and thus gives an incorrect view of the facts to be accounted for.

J. R. G.

Called Back. By HUGH CONWAY. Bristol: J. W. Arrowsmith.

We understand that the sale of this book has been very large, a fact which of itself is sufficient evidence of its popularity. How far it is evidence of its merits is quite another question, and one which must be discussed on other grounds in these columns. It is foreign to our purpose to enter on a minute criticism of its literary qualities, but

we may be permitted to say that the secret of the success of the book lies in the fact that the author never permits the interest to flag; he has set himself a task, and he keeps his shoulder against the collar all the way, the result being that, by a natural sympathy, the reader gets as much interested in the story as the narrator. The present writer is not ashamed to say that happening to take up the book as it lay on a drawing-room table one Sunday evening, without having heard of it before, he did not lay it down until he had finished it. The fatigue felt afterwards was considerable, but it was not the mere fatigue ensuing upon ordinary work; there had been a considerable outlay of mental force in keeping the attention fixed on what, in spite of many absurdities, is a very fascinating book. The tale is short enough to permit the author to keep himself at high pressure without any risk of a collapse, and we can, as we say, vouch for it that he communicates the high pressure to the reader.

The story consists of a narration of a schoolboy who went blind from lenticular cataract. When grown up, and still blind, he lived in London; and he wandered from his house one night, and losing his way, was directed to a wrong street by a drunken man. In this street was a doorway similar to his own, the family likeness apparently extending to the lock, for his own latchkey turned it. He had some doubts whether it was his own house, and he felt for a bust which he knew ought to be there, to take his bearings from it, but not finding it, he recognised the fact that he was in a strange house. Much perturbed by this discovery, and not without misgivings, that if the rightful owner caught him feeling for the bust, he might leave him to explain the matter before a magistrate, he groped his way about and heard voices in a room, the door of which he had touched in feeling for the bust. He came to the conclusion that it was better to knock and explain who he was than to let them find him; but, as he raised his fingers to tap, he heard another voice, a woman's voice, singing to an accompaniment on the piano. The song was a difficult one from an opera not well known then in England, and the singer, of course, sang so like a mistress of the art that our author began to think he had intruded on a company of "professionals," and congratulated himself, because he thought he should have less difficulty in explaining his presence; it being apparently the custom of "professionals" to wander into strange houses in the middle of the night and feel for busts. Suddenly he heard "a spasmodic, fearful

gasp that could convey but one meaning. "I heard it succeeded by a long, deep groan, which terminated in a gurgling sound which froze my blood. I heard the music stop suddenly, and the cry, the piercing cry, of a woman ring out like a fearful change from melody to discord, and then I heard a dull, heavy thud on the floor!"

Our author "threw open the door, rushed headlong into the room." . . . "My foot caught in something, and I fell prostrate on the body of a man. Even in the midst of the horror that awaited me I shuddered as I felt my hand, lying on the fallen man, grow wet with some warm fluid which slowly trickled over it." He was, of course, arrested by the others in the room, and had some difficulty in explaining to them that he was blind. They peered into his eyes with a strong light (one of them turned out afterwards to be a medical man), and they put him to a test, which we here transcribe for the benefit of those who have to examine malingerers. "I stood motionless. 'Walk this way—straight on—four paces,' said the voice. I obeyed. The third step brought me in collision with the wall. No doubt," adds our author, "this was an extra test as to the truth of my statement."

The end of this portion of the story was that his captors, afraid, perhaps, that if they walked him against anything else he might put his hands out, and save himself, and so spoil the success of their trick, gave him an opiate, and left him "drunk and incapable" at a police-station, whence he was conveyed home, and returned to consciousness on his own bed, his housekeeper sharing the belief of the police that the charge on which he was delivered to them was true.

The second part of the story may be said to be that which is devoted to an account of the cure of his lenticular cataract. After a very tedious recovery he goes abroad, to Turin, where he visits San Giovanni, and the first use he makes of his newly-recovered sight is to stare about him in church, where he sees a very pretty girl. After a series of adventures he contrives to become acquainted with this girl, when she returns to England, and finds that her history is shrouded in mystery. He, however, marries her with the consent of her "uncle," a Dr. Ceneri. This Dr. Ceneri bargains that "the man who marries Pauline March must be content to take her as she is. He must ask no questions, seek to know nothing of her birth and family, nothing of her early days. He must be content to know that she is a lady, that she is

very beautiful, and that he loves her." These conditions are gulped down, after a little hesitation on the part of our author, and he marries her. After the marriage, and while on the honeymoon, he discovers that the reticence of the "uncle" had extended so far as to omit to inform Mr. Vaughan, our author, that Pauline March, taken as she was, was taken insane. She had no knowledge of the past, and though we may often wish for that faculty ourselves, it is not one which we should desire to be associated with our brides. Lest we should be accused of giving a perverted meaning, by an abstract, we append the author's own description of her "case":—

"Slowly at first, then with swift steps, the truth came home to me. Now I knew how to account for that puzzled, strange look in those beautiful eyes—knew the reason for the indifference, the apathy she displayed. The face of the woman I had married was as fair as the moon, her figure as perfect as that of a Grecian statue, her voice low and sweet; but the one thing which animates every charm—the mind—was missing!

"How shall I describe her? Madness means something quite different from her state. Imbecility would still less convey my meaning. There is no word I can find which is fitting to use. There was simply something missing from her intellect—as much missing as a limb may be from a body. Memory, except for comparatively recent events, she seemed to have none. The powers of reasoning, weighing and drawing deductions, seemed beyond her grasp. She appeared unable to recognize the importance or bearing of occurrences taking place around her. Sorrow and delight were emotions she was incapable of feeling. Nothing appeared to move her. Unless her attention was called to them she noticed neither persons nor places. She lived as by instinct—rose, ate, drank, and lay down to rest as one not knowing why she did so. Such questions or remarks as came within the limited range of her capacity she replied to—those outside it passed unheeded, or else the shy, troubled eyes sought for a moment the questioner's face, and left him as mystified as I had been when first I noticed that curious enquiring look.

"Yet she was not mad. A person might have met her out in company, and after spending hours in her society might have carried away no worse impression than that she was shy and reticent. Whenever she did speak her words were

those of a perfectly sane woman; but as a rule her voice was heard only when the ordinary necessaries of life demanded, or in reply to some simple question. Perhaps I should not be far wrong in comparing her mind to that of a child—but alas! it was a child's mind in a woman's body—and that woman was my wife!"

There is some more to the same purpose, but the above will suffice for a description of the heroine. Mr. Vaughan, however, was married to this interesting creature, and found himself in something of the same plight as the celebrated Admiral Dalrymple, who paid £20 for a dunghill, and then offered £10 to anyone who would tell him what to do with it. He therefore resolved to try if the recovery of the mental state could be effected, and with the view of discovering the previous history of his wife, he tracked down Dr. Ceneri, who, however, was not very communicative. He did inform Mr. Vaughan that she had "received a great shock—sustained a sudden loss. The effect was to entirely blot out the past from her mind." Another character now appears, one Macari. He passes himself off for Pauline's brother. In consequence of a tale which he relates of having once, in battle, transfixed the heart of an Austrian soldier with a bayonet, and by gestures illustrating his story, Pauline has a fainting fit, from which she recovers only to undergo an accession of mental excitement. In the course of this she starts, followed by Vaughan, on a midnight stroll, and, quite unconscious of her surroundings, she makes for the house into which he had strayed three years ago, when he groped for the bust. She reached it, and Vaughan having his old latch key with him (the house was now uninhabited, and, as is customary in such cases, the door was left on the latch), he opened, and they entered. She made for the old scene of violence, sat down to the piano again, sang the difficult song again until she came to the place where she had before stopped suddenly, when she again gave the cry of horror. Our author then held his wife's hand for a few seconds, and saw through folding doors into the next room, where there was a blaze of light, with four men grouped around a table. These were Dr. Ceneri, Macari, a short man with a scar on his cheek, and a young man falling out of his chair stabbed to the breast. Dropping his wife's hand, the vision vanished. He afterwards charges Macari with the crime, who does not deny it, but alleges that he killed the man because he had

seduced Pauline and declined to marry her. This Vaughan will not believe, maintaining that Pauline is perfectly pure, and to make a long story short, he hunts up Ceneri, who informs him that Pauline's brother was the murdered man, Macari was the murderer, and was a disappointed lover of Pauline. The reason of the murder was Macari becoming vindictively excited by the brother calling him a low-bred beggarly Italian adventurer. Ceneri had previously to this become mixed up with certain Russian conspiracies, and was now on his way to the Siberian mines. There is a very graphic account of the journey Vaughan took to have an interview with him.

Having established the fact of Pauline's purity, he returns to England and to her. She does not remember him at first, but afterwards acknowledges that she has seen him in her dreams, travelling. They lived near each other for some time, and ultimately she recognized him, and he was made happy. She has, of course, quite recovered her mental equilibrium.

The story thus is an attempt to portray a case of what has been termed *Melancholia Attonita* in the heroine. Every one with experience of the insane will see how faulty is the portrait, and how inexpert the hand which has drawn it. The author seems to have read about *melancholia;* to have seen a few cases in asylum wards or elsewhere; to have noted the symptoms which were most apparent, and, to his eye, the most pitiful; and to have taken the most pleasing of them, and ascribed them all to one case, however incongruous they might be. Anything which he did not know of *melancholia* was supplied by his richly endowed imagination, which is never at fault, and makes ample demands upon the credulity of the reader. By his gift of assuming an appearance of earnestness, he carries the reader along with him, but the calmer after-perusal of the story reveals all its defects. He is rich in incidents of the *Deus ex machina* type, such as where the whole story of the murder is revealed to him when he takes hold of his wife's hand; but the style itself is bald enough. Thus he has nothing more novel to say of Pauline's appearance than that "her face was as fair as the moon; her figure as perfect as that of a Grecian statue," &c., &c., &c. This inflated style is not inconsistent with the method of the story, but it is singularly ill-suited to the description of a case of *Melancholia Attonita.* All the objectionable details of such a case are ignored, not as

though they should not be spoken of, but as if they did not exist; the result being an incongruous medley of symptoms. It is this which always makes the difference between real cases of insanity and those of the story-teller. He says in one passage that Pauline was not mad. Now, without wishing to drive him to bay on the mere meaning of a word, if she was not mad, in the general acceptation of the term, what was she? The fact is that he has no definite idea of the case himself, and seeks refuge from giving a definition, in a shower of words. "There is no word, I can find," he says, "which [it] is fitting to use," and we certainly agree with him. No writer could put the whole of the details of such a case before ordinary readers; and while for not doing this we do not blame him, yet on the other hand he is to be censured for describing beauties which could not have been there, and suppressing many repulsive details which most certainly would, thus casting a glamour on the picture, and putting silly-romantic notions of insanity into the heads of people, making many a girl, no doubt, sigh and wish she could be a Pauline! This abstinence from everything which might disgust in the description of her mental state is all the more remarkable when we reflect that the author does not hesitate to touch on unpleasant matters when it suits his purpose, as where he describes with unnecessary precision, his hand in contact with the blood of the murdered man.

Such, then, is the wonderful creation which we have seen compared to *Ophelia*, and to *Undine!* There is nothing in common with either. Ophelia is sufficiently true to life to warrant one in expecting to find her counterpart in any large asylum, and indeed there are but few in which there is not at least one Ophelia; while Undine was professedly an imaginative sketch of what a being would be, not without a mind, but without a soul.

Practical Essays. By Alexander Bain, LL.D.

All Prof. Bain's writings may be termed whetstones of intellect. Whether they secure agreement or excite dissent, they seldom fail to stimulate the reasoning powers, and to stir up suggestive trains of thought.

The present volume consists chiefly of articles reprinted from magazines. All of them are interesting to those who have at heart the progress of mankind; a few are of special value to the student and to the psychologist.

The first essay deals with common errors on the mind. Adverting to the doctrine "that mind is something indefinite, elastic, inexhaustible—a sort of perpetual motion, or magician's bottle, all expenditure and no supply," the writer says, "we now find that every single throb of pleasure, every smart of pain, every purpose, thought, argument, imagination, must have its fixed quota of oxygen, carbon, and other materials, combined and transformed in certain physical organs. And as the possible extent of physical transformation in each person's framework is limited in amount, the forces resulting cannot be directed to one purpose without being lost for other purposes. If an extra share passes to the muscles, there is less for the nerves; if the cerebral functions are pushed to excess, other functions have to be correspondingly abated. In several of the prevailing opinions about to be criticized, failure to recognise this cardinal truth is the prime source of mistake." After quoting the inculcation of cheerfulness by various writers, Dr. Bain says :—"I contend, nevertheless, that to bid a man be habitually cheerful, he not being so already, is like bidding him treble his fortune, or add a cubit to his stature. The quality of a cheerful, buoyant temperament partly belongs to the original cast of the constitution—like the bone, the muscle, the power of memory, the aptitude for science or for music; and is partly the outcome of the whole manner of life." How can the object, "to rouse and rescue the English population from their comparative dulness to a more lively and cheerful flow of existence" be carried out? "Not certainly by an eloquent appeal to the nation to get up and be amused. The process will turn out to be a more circuitous one." "The only answer not at variance with the laws of the human constitution is—Increase the supports and diminish the burdens of life." A kindred error is "the prescribing to persons indiscriminately certain tastes, pursuits, and subjects of interest, on the ground that what is a spring of enjoyment to one or a few, may be taken up, as a matter of course, by others as to the same relish." "I have heard a man out of health, hypochondriac, and idle, recommended to begin botany, geology, or chemistry, as a diversion of his miseries. The idea is plausible and superficial." "We may gaze with envy at the fervour of a botanist over his dried plants, and may wish to take up so fascinating a pursuit: we may just as easily wish to be Archimedes when he leaped out of the bath; a man cannot recast his brain nor re-live his life." A taste is the offspring of natural endowment or of prolonged education. These reflec-

tions, too often unthought of, might well be laid to heart when we seek a clue to rouse a melancholic patient from his gloom.

The fallacies hanging round the old dogmas of Free Will and Moral Ability and Inability are discussed briefly.

The second essay, on Errors of Suppressed Correlatives, contains numerous examples of a fallacy that Dr. Bain always delights to expose. One instance may be quoted. "It is a fallacy of the suppressed relative to describe virtue as determined by the *moral nature* of God, as opposed to His arbitrary will. The essence of Morality is obedience to a superior, to a law; where there is no superior there is nothing either moral or immoral. The supreme power is incapable of an immoral act. Parliament may do what is injurious, it cannot do what is illegal. So the Deity may be beneficent or maleficent, He cannot be moral or immoral."

One other article, the essay on "The Arts of Study," deserves also a word of notice. Persons who have not yet definitely formed for themselves a plan of work will find some helpful suggestions. The leading ideas are to select a text-book-in-chief, and to make abstracts, improving where possible the author's form or method of exposition. Little sympathy is shown towards mere "book-gluttons, books in breeches," as Macaulay, Sir William Hamilton, De Quincy and Johnson are called. "Gibbon was a book devourer, but he had a plan; he was organising a vast work of composition. Macaulay also showed himself capable of realising a scheme of composition; both his history and his speeches have the stamp of method, even to the pitch of being valuable as models. Hamilton and De Quincy, each in his way, could form high ideals of work, and in part execute them; but their productiveness suffered from too much bookish intoxication."

In regard to style, some slipshod phrases, coming from such a master of expression as Dr. Bain, can only excite surprise. On page 83 is an impropriety of phrase equal to any of those pointed out on page 196 of his own grammar. Speaking of the fundamental sciences—Mathematics, Natural Philosophy, &c., he says that "Mathematics precedes them all." This is making Mathematics precede itself! On page 213 we see this specimen of concord—"Both positions has its peculiarities."

Notwithstanding these oversights the volume will repay the attention of a couple of hours: one can read the brains out of it in that time. W. R. H.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *German Retrospect.*

By William W. Ireland.

The Supporting Tissue of the Central Nervous System.

Dr. Gierke, of Breslau, has, in two articles in the "Neurologisches Centralblatt" (Numbers 16 and 17, 1883), given the results of special researches on the neuroglia. He accuses Deiters, Boll, Golgi, and Jastrowitz of making incorrect descriptions, and of mistaking the results of their own reagents and dyes for natural structures. Gierki promises to publish his researches at greater length with illustrations, which are highly necessary in the description of delicate tissues. In the meantime he gives a number of details which could only be fairly reproduced by translating his papers. The neuroglia is the supporting tissue or frame-work of the nervous centres. It forms one-third of the substance of the grey matter, and its cells throw out branching processes which, taking the shape of flattened fibres, form sheaths for the nerve tubes. These never lie against one another, as Boll imagined. The cells of the neuroglia in the spinal cord of the sheep have a diameter of from 0·005 to 0·008 mm., and their processes are sometimes as long as from 0·4 to 0·2 mm. The neuroglia is everywhere, save at a part of the medulla oblongata, where the nerve tubes of the stratum zonale Arnoldi crowd upon one another, and lie directly under the pia mater. In other places, as in the substantia gelatinosa Rolandi, the neuroglia prevails, and there are few nerve elements. In contradiction to those who hold that the perivascular spaces may be owing to retraction of the dead tissues or contraction of vessels, Dr. Gierke maintains that there is not the slightest doubt that the perivascular spaces exist in the living brain. They are of varying calibre, and their strongly developed cellular ramifications are analogous to the sinuses in the lymphatic gland. In some places, as in the central canal of the spinal cord, he has found the large vessels surrounded by perivascular canals, which he has traced into real lymphatics.

On the Development of the Nerve Fibres in the Gyri of the Human Brain.

Dr. Franz Tuczek has a well-written paper on the subject in the "Neurologisches Centralblatt" (No. 20, 1883). Huschke observes that a child comes to the world with one-third of the volume of his brain; he acquires the second third in his first year, and the last third is formed between this time and his twenty-first year. Merkel has shown that the development of the skull takes place at two sepa-

rate periods from birth to the seventh year; then follows a pause till the commencement of puberty; then a second period of increase, which goes on till the completion of growth of the cranial bones. According to Huschke and Bischoff, in the first year of life the brain. grows about 450 grammes—that is, more than 1 cc. a day. Dr. Tuczek finds that Exner is mistaken in thinking that there are no nerve fibres in the brain of the new-born child. He himself made an examination of four bodies of children, the oldest of whom was 27 days. The fibres in the hemispheres are generally very fine, as they go a short way, being supposed to keep up the communication between the groups of nerve cells. Dr. Tuczek gives the following conclusions:—

1. In the hemispheres of the brain nerve fibres having an axis-cylinder appear first in the medullary and then in the cortical matter, the development going from the centre to the periphery of the brain.

2. The nerve fibres with axis-cylinders first appear before the end of the ninth month of intra-uterine life in the medullary and cortical substance of the paracentral lobes, and the anterior and posterior median convolutions; then in the occipital lobes and in part of the island of Reil. The other convolutions do not yet contain any such fibres. According to Flechzig these nerve fibres appear first in the pyramids of the medulla oblongata, and then extend upwards to meet those in the brain.

3. The further development of the nerve fibres in the hemispheres goes on in a symmetrical manner. Except those in the paracentral lobule, the median convolutions, and the occipital lobe, there were no nerve-fibres with axis-cylinders in the hemispheres of a child 27 days old, and even in those situations the fibres could only be found in the lower third of the cortex. Thus there were no fibres running from the upper layers of grey matter across the gyri.

5. The appearance of the fibres comes latest in the frontal lobe, both in its superior and basal parts. No traces of such fibres could be found in the gyrus rectus, the orbital part of the frontal lobe, and in the second frontal, either in the cortical or medullary matter.

On the Histo-Genesis of the Human Brain.

Dr. Signo-Fuchs has communicated to the Academy of Science at Vienna his researches on the development of the tissues of the brain ("Centralblatt für Nervenheilkunde," No. 1, 1884). He used 33 brains from the sixth month of fœtal development to the eighth year of life.

The following is said to be a short *resumé* of his conclusions:—Deiter's cells are found in their normal arrangement in the brain of the child five months old.

The pyramidal cells are already recognizable in the new-born infant. He found the typical fifth layer in the cortex of a child aged seven months. Fibres with axis-cylinders were found in the white

matter of the brain towards the end of the first month after birth; in the second month they were found radiating upwards.

In the superior stratum of the cortex the first fibres with axis-cylinders are found in the fifth month, in the second layer after the completion of the first year, while the fibres connected with the fibræ arcuatæ in the third layer appear in the seventh month.

In the child of eight, perhaps in that of seven years, the fibres of the cortex and medullary substance have taken the same arrangement as in the adult. Those fibres in the cortex which afterwards become the thickest appear first. They increase in calibre as they grow older. Dr. Fuchs has never observed a decided case of division of a fibre with an axis-cylinder. He could not find the great ganglion cell described by Exner in the upper layer of the cortex of the new-born child.

The Cortical Centres for Touch, Sensibility, and the Muscular Sense.

Dr. W. Bechterew, of St. Petersburg (in a communication to the "Neurologisches Centralblatt," No. 18, 1883), states his reasons for believing that such centres really exist on the surface of the hemispheres. Hitzig and Nothnagel thought that, after extirpation of the motor area of the brain, there was a loss of muscular sense; but Bechterew states that he could not, in his experiments, satisfy himself that, after extirpation of the motor area to the hemispheres, if the lesion did not pass beyond the bounds of this area, such a loss of sensibility really existed. If the animal allowed its paw to rest in inconvenient and unaccustomed positions, this was from the awkwardness of its adjustments owing to the injury of the motor power. Dr. Bechterew makes no reference to the observations of Goltz, who stated that, after a removal of any considerable portion of the cortex, there was a loss of sensibility on the opposite side of the body.

Having come to the conclusion that the centre of sensation for the skin and muscles must exist apart from the motor area, Dr. Bechterew sets himself to look for these centres behind the median gyri. Avoiding the lots already knocked down to Ferrier and Munk, he finds a considerable area quite unoccupied. The function of this extensive region, which in the human brain is represented by the parietal lobe, has not been ascertained by any physiologists. Munk, it is true, has made some claims on this area as centres for the sensibility of the eye and head; but to this Bechterew objects that such a large surface of brain cannot be put apart for the sensibility in so small a part of the organism. Dr. Bechterew arrives at the conclusion, from his experiments on dogs, which occupied several months, that after destruction of these parts there were marked alterations of sensibility, and he finds that lesions of particular parts induce derangements of feeling of touch alone, or of the muscular sense of sensibility to pain.

Dr. Bechterew promises to publish in a more extended form the results of his researches; in the meantime we may indicate the situation of his three new centres. That for the perception of touch is described to lie in the dog immediately behind and outward from the motor area. The centres for the muscular sense and the sensibility to pain must, he thinks, lie close together, as sometimes a lesion caused injury to the one function or to the other. The centres are believed to be situated near the summit of the temporal lobe, above the commencement of the Sylvian fissure.

Fatty Granules and Cells.

Dr. Virchow has returned to an old subject in a paper read to the Berlin Medical Society ("Centralblatt für Nervenheilkunde," No. 2, 1883). Twenty years ago he observed fatty granules in cells lying free in the white substance of the brains of dead-born or new-born children who had died soon after birth. He considered that these were of inflammatory origin, the result of degeneration, and thinks so still. This form of degeneration is, he holds, analogous to the yellow softening of adults, only that in the first case the axis-cylinders are more involved. Virchow has examined 44 new cases, which confirm his views. He has seen along with the fatty cells and granules increased size of the neuroglia cells, but never found the fatty cells accompany general malnutrition alone. Dr. Jastrowitz stated that he had found these granular cells in the brains of almost all children whom he had examined. He believed that they have something to do with the development of the nerve fibres, and it was a confirmation of this that they occurred always in rows. If they were more common in the brains of weak and anæmic children, it was because the children's growth was retarded. He said that Stricker had shown that every embryonal cell was at one time granular, and in the brains of young and healthy animals he (Jastrowitz) had seen these same granular cells. He was not satisfied that the chemical tests were sufficient to prove that these cells were really fatty, and Dr. Liebreich stated that in numerous examinations in the brains of individuals of all ages he had failed to extract fat.

On Recurring Degenerations from Lesions to the Cortical Motor Centres and the Motor Columns of the Cord.

Dr. Löwenthal ("Pflüger's Archiv.," Band xxxi., Heft 7 and 8, quoted in the "Neurologisches Centralblatt," No. 16, 1883) has made a microscopical examination of the animals operated upon by Professor Schiff. In some of these the motor area of the brain had been removed; in others the spinal cord had been cut at the level of the fifth cervical vertebra.

He found that, after extensive but not deep extirpations of the cortical motor area, there is a secondary degeneration of the lateral

columns. This degeneration is much less marked than what follows sections of the cord.

In an addition to Löwenthal's paper Professor Schiff remarks that, after this secondary degeneration of the cord following injuries to the brain of the ape, there is wasting of the paralysed muscles which here and there has a resemblance to progressive muscular atrophy. Schiff, in the same number of "Pflüger's Archiv.," admits that, in his experiments in 1870, he had allowed himself to be deceived by the diversion of electrical currents, and that he now believes the posterior columns of the cord are the only parts excitable by electricity.

Lesions in Rabies Canina.

S. Ivanow (reported by Dr. Bechterew in the "Neurologisches Centralblatt," Nov. 14, 1884) has made a histological examination of ten brains of dogs which died from hydrophobia, at the Veterinary Clinique at St. Petersburg, and two brains in which the disease was suspected, accompanied with examinations of ten healthy brains for comparison. The following were the lesions found in all the cases of hydrophobia:—There was a general hyperæmia of the tissues of the encephalon, reaching at some places to acute inflammation, and in spots here and there there were smaller extravasations. Around the vessels there was a number of lymphoidal elements, with which the venous and arterial walls were also infiltrated. In some places there was thrombosis of the vessels. In some spots the lymphoidal elements had passed into miliary abscesses. A few more cells were degenerating or degenerated, but in general the nerve cells were spared. The yellow hyaloid lying upon the vessels, described a few years ago as characteristic of rabies, is now regarded as a normal appearance found in all dogs who have attained a certain age. These alterations were found most marked in the medulla oblongata, after this in the corpus striatum and the optic thalami, while they were much less apparent in the hemispheres of the brain. These lesions explain in a great measure the symptoms of rabies, such as the difficulty of deglutition, the loss of motor power in the tongue and of the lower jaw, the increased or diminished salivation, and the presence of sugar.

On Insanity Following Exposure to a High Temperature.

Dr. Rud Victor has an elaborate article in the "Allgemeine Zeitschrift für Psychiatrie" (XLer Band, 1stes and 2tes Heft) on this subject. In the first half he makes a study of sunstroke and its effects on the nervous centres. It would appear that exposure to a powerful sun is sometimes followed by delirium and convulsions instead of stupor and coma. Such preliminary symptoms may be succeeded by paralysis, loss of memory, and mental weakness. Sometimes the patient falls into an incurable chronic state which bears a considerable resemblance to general paralysis. Dr. Victor records the

instance of six hundred Belgian soldiers who were in 1853 exposed to a march of four hours' duration in a very hot sun. Of these four hundred fell out, fourteen died, and twenty-two became insane. The bodily heat rises under exposure to a fierce sunshine to from 43° to 45c.

It is doubtful whether exposure to the glare of the sun can cause meningitis, save when assisted by unusual thinness of the cranial bones; but the effects observed after death showed congestion of the membranes, extravasation of the blood corpuscles, and abscess and sclerosis of the brain.

Dr. Victor then proceeds to consider the effects of forced heat as observed in the engine-rooms of steamboats, iron and other foundries, where the workmen are exposed to an artificial temperature, sometimes running up so high as 65c. Esquirol, Simon, Eulenburg, and others made no doubt that this was sometimes a cause of mental derangement. Moreau and Voisin have described a form of insanity which they called *folie des cuisiniers*, affecting cooks exposed to the heat of great fires. Dr. Loeser found that the workmen at the gun manufactory at Suhl suffered very much from the forced heat, and were affected by subcutaneous inflammation. The workmen at the furnace were often troubled by headache, giddiness, a feeling of general weakness, and disorders of digestion. Sometimes they fall down insensible, and have to be carried into the fresh air. Amongst the work-people this illness goes by the name of Hütten Katyc. In one case the insensibility lasted for two days. In some parts of their work the men are obliged to cover their heads with wet cloths.

For the last ten years a series of cases have passed from the gun-foundry of Spandau into the asylum of Eberswalde. Eliminating some cases where the insanity appeared to be owing to other causes, Dr. Victor gives a description of fifteen patients admitted to this asylum after habitual exposure to great heat in gun-foundries, the high temperature exciting changes in the brain, and afterwards insanity.

Five of these cases had hereditary tendencies to insanity, and one was a drunkard. In all cases the disease came on gradually, generally commencing by disquietude and headache; then followed a stage of depression, sometimes passing into melancholia with suicidal tendencies. In ten of the cases the disease had a strong resemblance to progressive general paralysis, there being paralytic disturbance of speech and inequality of the pupil. The stage of melancholy was succeeded by acute mania; the patients gave utterance to senseless boastings, declined in bodily and mental health, and were unclean in their habits. Then followed epileptic and apoplectic attacks, and, after a prolonged decubitus, death in a state of marasmus. Of the other five cases, two were melancholic and three demented. Of the fifteen patients, nine died, four were discharged, of whom one was cured, and two remained still in the asylum in a state of dementia.

The lesions found after death were discolouration and thickening of the membranes, adhesion of the dura mater to the bones, œdema of the pia mater; adhesion of this membrane to the convolutions were only observed in one or two cases. There were also noticed granulations on the surface of the ventricles and atrophy of the brain substance—in short, the appearances of diffused chronic inflammation. Of the six cases published by Bertens, three recovered and two showed symptoms of progressive paralysis.

Dr. Victor argues, from the absence of other apparent causes in most of his patients, that we have here to do with a specific disease, from exposure to a high temperature exciting changes in the brain resulting in insanity.

On Insanity Arising from Auditory Hallucinations.

Dr. Fürstner brought this question before the meeting of the Medical Association at Carlsruhe in October, 1883 ("Zeitschrift," Band xl., Heft 1 and 2, and "Neurologisches Centralblatt," No. 12, 1883). In addition to two already published, he has given 26 cases of insanity which seem to have originated in diseases of the ear or auditory nerve. He observes that hallucinations of hearing often commence during the night, or when the patient is alone, that is, when other auditory impressions were absent. Aurists have observed that patients who hear noises in the ear are often much disturbed and oppressed, and sometimes have suicidal tendencies. He asserted that hallucinations may be produced by the action of electric currents upon the acoustic nerve. Of Fürstner's 26 cases, 19 were troubled with subjective noises in the ear. Many of these were old people. In the majority of cases there was chronic catarrh of the cavity of the tympanum and alteration of the membrana tympani. In these cases the prognosis was generally unfavourable. In one case the patient recovered from a state of stupor and melancholy through the sudden discharge of purulent matter by the meatus. He cited a case from Schüle of the same character. In one patient with melancholia there was chlorosis with anæmic noises; in another there was compression of the vessels of the neck through an enlarged thyroid gland.

Experimental and Clinical Researches on Epilepsy ("Archiv.," xiv. Band, 2 Heft).

In the introductory history of previous researches which, according to the German custom, is appended to Dr. Unverricht's paper, we are informed that there has recently been a return to the old view that the seat of epilepsy is in the pons and medulla oblongata. This was owing to the experiments of Albertoni, who found that after extirpation of the motor zone of one hemisphere general convulsions could be produced through electrical stimulation of the remaining hemispheres. He saw general convulsions appear after the entire removal

of the cortex, when he applied stronger currents to the nerve masses below. This induced him to conclude that the epilepsy produced by stimulation of the hemispheres was really owing to the irritation being conveyed to the medulla.

To elucidate these and other questions about the pathology of epilepsy, Dr. Unverricht has made some careful clinical observations, and tried a number of experiments upon dogs, the result being communicated in an elaborate paper which fills 87 pages of the " Archiv." In his experiments Dr. Unverricht used weak electrical currents, considering that strong ones are apt to be misleading. He found that an electric stimulus applied to the grey matter of the hemispheres causes epileptic attacks, whether the electrodes are applied to the so-called motor regions or to those behind. The posterior lobe, believed by Munk to be a visual centre, when stimulated, excites epileptic attacks. The disposition to fits under this stimulus is, as a general rule, independent of the supply of arterial blood to the cortex, of the bodily temperature, and of the reflex excitability. The duration of the electric stimulus was found to have more efficacy in causing convulsions than the strength of the current. The course or succession of the convulsions was found to correspond with the arrangement of the motor centre in the brain, so that only such groups of muscles come successively into action whose centres lie near one another in the motor area. For example, it is never observed that the klonus of one extremity follows convulsions of the muscles of the ear passing over the orbicularis whose centre lies between; nor does one ever see convulsions of the muscles of the jaw follow those of the lower extremity. The author's researches have also led him to the following results:—That after convulsions have gone through one side of the body, when they pass over to the other side, the muscles are affected in exactly the same order as in the side first affected. The convulsions may either oscillate from one side to the other, passing from one side of the body and then returning to the other side, and so on till general convulsions ensue; or the same tract of muscle may be visited by a third and fourth convulsive attack, until general convulsions follow. Special muscular groups sometimes take part in the convulsive fits, which shows that their centres are fully excitable during the fits or are not excitable at all.

In the course of his observations, Dr. Unverricht found two spots in the cortex, from which he could excite isolated motions of both halves of the tongue. At first he believed that only the left half of the tongue received its nervous stimulus from the left hemisphere, and that the motions of the right side of the tongue were passive, and *vice versa*. In order to decide this question, he cut through the hypoglossal nerve on the same side (the left) as the stimulated hemisphere; he then saw the movements of the left half of the tongue cease, while those of the right half were continued. In the same way the innervation of the retractive muscle of the tongue was decided. They were proved to de-

rive their nervous supply from both hemispheres. By sawing the jaw he was able to differentiate the action of the muscles on both sides. He came to the conclusion that the masseter and temporal muscles always receive their nervous supply from both hemispheres. The muscles of the neck and trunk seem to get their principal nervous supply from the hemispheres of the same side; but he thinks farther researches are needed to determine whether they do not receive some fibres from the opposite side.

Dr. Unverricht was able to make sections of the corpus callosum, which generally caused death by bleeding into the third lateral ventricles ; but he was able to ascertain that division of this commissure did not prevent the passage of convulsions from one side of the body to the other. On a stimulus being applied to one hemisphere, convulsions attacked one side of the body and then the other, after a pause between.

Extirpation of the motor zone in the status epilepticus was found to cause the convulsions to cease on one side. If the motor zone were removed on both sides the convulsions entirely ceased.

Dr. Unverricht considers the following experiment very decisive : —He took a dog and excited convulsions on both sides of the body by the application of the electrodes, after which he removed the whole motor area of the left hemisphere, comprising the cortical centres for the limbs, those for the muscles of the trunk, neck, jaw, and tongue, leaving only the centre for the orbicularis muscle. On stimulating this solitary centre, there followed a long-continued convulsion of the right orbicularis, and of the muscles of the ear, while the other muscular groups remained in absolute rest, save that on the left risorius muscle, whose centre is probably not sufficiently ascertained, there were some convulsive startings. Then followed rhythmical turnings of the eyes to the right, which continued for some time, so that one who looked on from a distance might think the convulsions had ceased ; but suddenly, and with great vehemence, there appeared convulsions in the left hind leg, which soon spread upwards through the body, involving the muscles of the tongue and jaw.

Dr. Unverricht holds that the convulsions caused by electric excitations of the cortex have a close resemblance to epilepsy, though he will not allow that the spasms produced in Brown-Sequard's experiments by division of the sciatic nerve or section of one half the cord do actually constitute genuine epilepsy.

The author considers that many forms of the aura epileptica prove that epilepsy originates in the cortex. Sometimes there are appearances of light and colour, or hallucinations. From all this he comes to the conclusion that the integrity of the motor cortical region is necessary to the evolution of a complete epileptic attack.

Sometimes the bodily heat increases during the fits by 1 or 2 degrees centigrade. In one case the rise of temperature was observed to be as high as 44·1 c. ; but a sinking of the temperature to 34·8 was found

neither to hinder the excitibility of the cortex nor the appearance of the status epilepticus. Anæmia will only check the appearance of fits when pushed to a dangerous degree. This was also true with asphyxia, and a new supply of oxygen caused the convulsions to reappear. It was found that morphia in large doses caused convulsions to cease; but more effectual for this purpose were intravenous injections of chloral and inhalations of ether, both of which promptly brought the fits to an end. Atropine was found to increase the excitability of the cortex so as to renew the convulsive attacks after they had ceased. This was not what was expected, as atropine is a well-known remedy in epilepsy. Dr. Unverricht, however, observes that different effects may follow the long-continued administration of a drug in small doses from the use of a single large dose.

Dr. Unverricht's experiments have led him to conclude that chloral is the most valuable remedy in the status epilepticus. It has recently been found very useful in the other motor neuroses, especially in chorea (Mosler).

Progressive Hemiatrophy of the Body.

In the "Neurologisches Centralblatt" (No. 16, 1883) there is a report of a remarkable case, described by Dr. Henschen, of Upsala. The patient, who is now 43 years of age, lost his parents from consumption, and had a cousin who was insane. When 14 years old he suffered a dislocation of the left ankle joint, which caused an inflammation rising to the knee. This was followed by pricking pains, formication, muscular startings, and feelings of rigidity in the affected parts. After this there was headache lasting for some months; and atrophy commenced in the left leg, and gradually became sensible over the whole left side of the body. At the age of 19 the patient was visited by an attack of melancholia, which passed away in a year, but returned two and a half years ago. The man's condition is described very minutely. On the right side he is strong and well-nourished, while the left side is everywhere smaller. When he stands upon the right leg his height is 170 c. When he stands upon the left leg his height is 164 c. The cranium is well developed and symmetrical, but there is a depression on the left temporal region, and the notch for the supra-orbital nerve is somewhat deeper on the left side. The whole left face from below the eyebrow is smaller, looking as if the upper and lower jaw had been resected. The opening of the left eyelid is smaller, but there is little appreciable difference in the size of the eyeball, and the pupils are equal. The tongue, as well as the neck, are symmetrical. In the trunk the left side seems, on the whole, somewhat smaller, but the atrophy is confined to the following places:—In the chest, between the fifth and seventh interspaces, there is a depression about 20 centimêtres in length, where the ribs may be felt under the attenuated skin. In the umbilical region there is another depression of 23 centimêtres long and 3½ centimêtres broad, lying from the

linea alba to the margins of the 10th and 11th ribs. The skin over these spots was thin as paper, and had fallen into folds; the muscles were atrophied. The left arm is shorter than the right, and all the muscles atrophied. The arm can be moved, though, owing to alteration in the elbow and wrist joint, the limb cannot be completely extended. The left hip is atrophied, and there is another depressed spot of from 3 to 4 centimêtres broad between the anterior superior spinous of the ileum and the first lumbar vertebra.

The whole left leg is atrophied, and 10 c. shorter than the right, but part of this shortening is owing to the limb not being capable of complete extension. The skin is thin as in the other atrophied parts, and the muscles wasted. Along the quadriceps run two parallel lines of ossification, about 10 or 20 centimêtres long. The left leg below the knee is about half the circumference of the right, and the calf has disappeared. Below the tibia and fibula are grown together, and the ankle joint ankylosed; the bones of the foot are immovably connected with one another, and the skin stiffly adhering to the hard parts. The toes are atrophied. The sensibility of the skin is not diminished; indeed, it is rather increased on the left side. The reduction to the induced and continued current are somewhat greater on the left arm than on the right, in other parts the reaction seems equal. The reflex action is stronger on the left thigh and abdomen than on the right. Nothing abnormal was discovered on the right side.

Dr. Henschen calls this a case of tropho-neurosis, arising from chronic irritation of the nerves distributed to the parts around the dislocated ankle, which the patient suffered from when 14 years old. At last it affected the brain, as shown by the melancholia and spasms. The patient is still alive.

Stuttering and Stammering.

Dr. Berkhan defines stuttering to be the incapacity to pronounce consonants or vowels, which is only occasional, and brought on by emotion; and stammering, where the incapacity occurs without any anxiety, and where the difficulty generally consists in pronouncing consonants. He finds these deficiencies of speech to be generally hereditary, and to occur amongst poor families. He finds that amongst children who stammer the circumference of the chest is very small; in some cases he found it even less than the circumference of the head. On looking over Dr. Berkhan's tables, we doubt whether he has allowed for the fact that the proportion of the circumference of the chest to that of the head is less with younger children. Apparently Dr. Berkhan is better able to make original observations than to go through the necessary task of ascertaining what has been done by previous observers. At any rate, he cannot be acquainted with what has been written upon idiocy in the English language, or he would never have claimed as an original observation of his own that stuttering and stammering are common with idiots, or that a high palate is apt to occur in

those who are born deaf, or that deafness and idiocy are commonest with males. He has a better claim to the merit of the observation which we have not read before, that the vaulted or saddle-shaped palate is frequent with stammers.

Disturbances of Vision in General Paralysis.

Dr. C. Fürstner, in two papers in the "Archiv." (Band viii., 1 Heft and ix., 1 Heft), a *resumé* of which was given in the German Retrospect (Jan., 1879, p. 681), called attention to a peculiar disorder of vision in general paralysis, which he thought to be dependent upon a brain lesion. It seemed to consist in a loss of the power of recognising objects often confined to one eye only. Dr. Carl Stenger, in a paper in the "Archiv." (Band xiii., Heft 1), continues the study. He distinguishes two disturbances of vision. In the one there is a loss of the power of perception (Wahrnehmungs-vermögen), in the other a loss of the power of recognition, or forming an ideal representation (das Erkennungs, das Vorstellungs-vermögen), the result of lesions of the occipital lobe, which Munk calls soul-blindness (Seelen-blindheit), and Goltz visual weakness of the brain (Hirnsehschwäche).

Wilbrandt thought that the confusion of vision might be owing to hemiopia or defect of sight in one portion of the retina, so that the individual might make false conclusions which his mental weakness would render him less liable to correct. It ought to be carefully kept in mind that sight requires not only the integrity of the apparatus of the eye and optic tract and ganglia, but that the recognition of objects and the ordinary exercise of vision require a number of mental processes of apprehension, recognition, comparison, memory, and judgment, which seem to many intuitive, since they have been acquired in infancy. The mental nature of many of our acts of vision has been demonstrated by Helmholtz. In a disease like general paralysis, where the mental faculties slowly waste away, it seems likely enough that the power of making correct inferences from the impression of the senses may be lost before the senses themselves are weakened or destroyed. These considerations are certainly not always kept in view; and this is one of many instances where careful observations are vitiated by want of psychological analysis, or by careless, though convenient assumptions at the outset of the investigation.

It is clear that where derangements or weakness of sight and hearing occur in advanced general paralysis the weakened mind would have great difficulty in correcting the sensory deficiencies, and that the patient would give no assistance in analysing his sensations; hence, in a disease, with diversified lesions and diversified sensory and mental deficiencies like general paralysis, it would be very difficult to say if the patient were unable to recognise objects by sight, whether the deficiency lay in the optic tract, in the corpora quadrigemina, or in the hemispheres.

Wernicke observes that in general paralysis there is a rapid loss of the memory of the images derived from the organs of hearing and

sight. Some of Dr. Stenger's patients had evidently lost the power of recognising the import of objects of sight and sound, and one had lost the power of learning what objects were through touch. In another, to use Dr. Stenger's own words, the power of the mind to elaborate the impressions of the senses seemed to be entirely lost. Dr. Stenger, in describing one of his cases, says that after severe convulsions ending in stupor, which lasted about ten hours, the patient began to recover. He heard every sound, but when questions were put to him he either did not understand them, or mistook the meaning, so that he gave wrong answers or no answer at all. In speaking, he changed the words and letters, and when objects were held before him he could not name them. He ran against things in his way, and was not afraid of a lighted body held before his eyes. It was only when he felt the burning heat of fire that he drew back, and when a needle was held before his eyes he seemed to recognise what it was only when it pricked him. He did not seem to recognise wine till his lips were moistened with it, when he showed the desire to drink. In fact, the power to gain the right import of the impressions of the senses seemed to be lost. In all the five cases, save one, the deficiencies of the visual faculty were common to both eyes. The lesions found in the brain of those cases which he examined were of the usual character in general paralysis, and, as he admits, do not confirm any particular theory of localisation.

Dr. Zacher ("Archiv für Psychiatrie," xiv. Band, 3 Heft), in a long contribution to the "Pathology and Pathological Anatomy of General Paralysis," continues Dr. Stenger's inquiries, accepting his distinctions of Seelenblindheit and Rindenblindheit, or cerebral amaurosis.

The soul-blindness, which is not common, is always double, and associated with aphasia, and some degree, more or less, of paralysis of the right side. One of his patients, for example, failed to recognise objects held before him; when bread was put near his eye he did not eat till it was placed between his lips. Formerly he was fond of smoking, but now, when a cigar was put into his hands, he did not recognise it. Nevertheless, he seemed to see, for he followed objects with his eyes, and when anything got rapidly near, the eyelids were closed.

In one case he describes a general paralytic seized with convulsions which diminished motor power and sensibility on the right side, the right pupil more dilated than the left. There was a complete loss of visual power on the right side, so that there was no closure of the lid when a burning light was rapidly brought near to the eye; but the reaction existed on the left side, in which the sight seemed unaffected. In the next case the paresis and diminution of sensibility was on the left side. There was the same loss of visual power in the left eye, the visual power in the right eye being preserved. In both patients the loss of vision disappeared in a few days. Twelve cases of a similar kind fell under Dr. Zacher's observation.

In the second category Dr. Zacher gives three cases as examples of double-sided hemiopia.

It was ascertained by careful examination that objects were not perceived on the temporal side by one eye, and on the nasal side by the other. In cases like these total blindness would only be produced by double hemiopia. Dr. Zacher thus reduces the visual deficiencies into two categories—

1. Pure soul-blindness. Further observations are required to make out whether this blindness is always double with motor derangements on the right side and aphasic symptoms.

2. Double-sided visual disturbances, which are probably true hemiopias, and are connected with lesions in the occipital lobes.

He acknowledges that some cases described by Fürstner and Willbrandt would probably require another class.

Tendon Reflex and Tâche Meningitique in General Paralysis.

Dr. Zacher, in his general paralytics, finds the tendon reflex always heightened after convulsive attacks (even when the fits of motor excitement are followed by paresis). The greater the irritation the greater the clonus. He has often repeated Nothnagel's observation that, by striking with the percussion hammer upon the paralysed leg, startings are produced in the foot of the opposite limb. On the other hand, when symptoms of paresis or paralysis alone appear, the clonus is found to be diminished, so that sometimes it nearly disappears. Dr. Zacher finds this result in accordance with the views of Schwartz, who stated that if a process causing destruction of the motor and sensory areas of the brain has a paralysing effect on more distant parts of the nervous system, that even the reflex centres of the spinal cord which stand in connection with these parts of the brain are more or less paralysed, but when the process is of a stimulating or irritating character, that a stimulating effect is produced. He also found that where the sensibility to pain was diminished, the reflex from cutaneous impressions was also diminished.

In some cases great disturbance of the muscular sense was observed, so that the patient did not know the position of a limb, and kept it in strange and inconvenient positions.

Dr. Zacher also directs attention to two cases of vaso-motor disturbance in general paralysis, in which there was transudation of a serous fluid. When the surface was touched with a blunt point, the spot first turned white, then red, and at last there was elevation of the skin. After a prick there was no blood, but a raising of the surface, owing to the transfusion of serous fluid into the injured parts. This Dr. Zacher regards as an exaggerated form of the tâche meningitique, which he has observed after epileptic fits, and even after attacks of the petit mal.

An Insane Mother Kills her Five Children.

Dr. von Krafft Ebing (in "Friedreich's Blätter für Gerichtliche Medizin," Band xxxiv., 1883, quoted in the "Neurologisches Centralblatt," No. 13, 1883), gives a tragical story of the result of the delusion of suspicion. The subject had a strong hereditary neurosis, and experienced hallucinations of a religious character when nine years old, and which afterwards frequently returned. Her education and moral training had been neglected in childhood. She was married when twenty-seven, and lived happily until her thirty-second year, when she lost all her property through an usurer, and had to suffer great hardships. In the hope of regaining some portion for her children, she involved herself in reckless lawsuits, and as she was unable to obtain a favourable verdict, she abused the court in an unmeasured manner. In spite of her violent language and imprudent conduct, she was declared by the physicians employed by the court to be sane, and was punished for defamation. About a year later, as she continued to complain, and had become wilder and more senseless in her language, threatening to kill her children, the question of her responsibility was again raised ; but the physicians said that, though she had fixed ideas, she was not insane. But in consequence of her excited state of mind, and her threats to kill her children, they recommended her to be kept under supervision, which, however, was not done. The poor woman's distress became more pressing. She had frequent hallucinations, which seemed to point to heaven as the only refuge remaining for herself and children, and strengthened by an old vow to dedicate her children to heaven, she believed that she was entrusted to kill them. After contending with despair and hallucinations for nearly two years, the catastrophe took place, which could have been avoided if the mother's state of mind had been rightly understood. On the 12th August, 1881, she at length resolved to kill her children to save their souls. She prayed fervently that if God wished to prevent the deed to send someone to stop her. She waited at the door to see if anyone came, but as no one appeared, she went into the house and deliberately killed the five children with a pestle, at each blow making the sign of the cross and calling the name of Jesus. After a long prayer in the village church, she arranged the linen for the corpses, and confessed the deed in a quiet and composed manner. Then at length she was sent to an asylum.

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2. *English Retrospect.*

Asylum Reports.

(*Continued from p.* 303.)

Newcastle.—The day-space of what may be called the "refractory ward" for women has been increased and a similar improvement is contemplated on the male side. It is also intended to warm the single rooms.

Northampton (County).—Patients continue to accumulate in this asylum with great rapidity. There are already 61 in excess of the number for which it was originally constructed. Extensive additions and alterations are about to be made.

We suppose this is the only pauper asylum in England where it can be reported that "No charge has been made upon the County Rate for any purpose connected with the asylum during the past or any year since the completion of the asylum."

Northumberland.—Concerning the discharge of harmless lunatics to the care of their relatives, Dr. McDowall says: "During the last nine years, the duration of my official connection with this asylum, a large number of patients have been so disposed of, to the great saving of cost and the deferment of the necessity of asylum extension. I have always acted on the principle that the happiest place of residence is, or should be, a private dwelling. I have accordingly encouraged applications to be made to you for the discharge of harmless cases to the custody and care of relatives. You have been able to accede to the majority of them, having first tried to satisfy yourself as to the respectability of the applicants and their ability to maintain their friends in comfort. Still it cannot be denied that the practice may have drawbacks. Once a patient has left the asylum, there is no guarantee that he or she will be properly cared for. If the patient ceases to receive parochial relief, all official supervision is at an end, and he may be restrained, secluded, improperly and insufficiently clothed and fed, and ill-used in a variety of ways, before public scandal attracts the attention of the police. Before county asylums were built, patients were necessarily neglected and often ill-used, not always wilfully so, but often through ignorance and inability to do better. If such were the case so recently, it is greatly to be feared that it is so still, for human nature changes little in such a short time, and the supervision has not improved. Most of the progress which has occurred in public asylums has been due, amongst other causes, to improved supervision and greater publicity, and it does not admit of a doubt that, were the inspection by Commissioners and Magistrates to diminish in its thoroughness, the general condition of asylums would deteriorate, and we might have a

renewal of the scandals which engaged public attention some 50 years ago. If so much can be done in public institutions by official inspection, it cannot be doubted that equally satisfactory results would follow from the same care bestowed on cases in private dwellings."

Norwich.—Great energy appears to be displayed in the removal of various defects in this new asylum, and in bringing it as quickly as possible into a thoroughly comfortable and efficient state.

Nottingham (County).—Precautions required to be adopted to prevent the introduction of small-pox, a disease prevailing in the neighbourhood. Only one attendant, non-resident, was affected.

An inquest was held in the case of a male patient who died from injuries received before admission. Mr. Aplin very correctly says: "In many instances I fear sufficient inquiry is not made into the bodily condition of the insane when about to be sent to the asylum. Their mental aberration being proved, the bodily condition is often ignored; the result being that patients almost fatally exhausted by disease, prolonged refusal of food, sleeplessness, or by injuries, are sent upon a journey to the asylum for which they are totally unfitted, and from the evil effects of which they have great difficulty in rallying."

Such a case points strongly to the necessity of a thorough physical examination of every patient on admission, and in the presence of the relieving officer. Should the patient be too excited or otherwise make a *thorough* examination impossible, it should be so stated in writing and signed by the medical and the relieving officer. Such a precaution may save much subsequent trouble.

A head attendant has been appointed to the male side, and the results are reported to be very satisfactory.

The Commissioners notice the unfortunate position of this asylum. Two hundred and sixty patients cannot be taken beyond the walls for exercise. This is greatly to be regretted.

Nottingham (Borough).—This asylum, though opened so recently as August, 1880, is reported to be already too small for its purpose.

An unfortunate dispute has arisen between the Visitors and the Commissioners relative to the necessary enlargements. Plans had been prepared and forwarded to London, but as the Commissioners insisted that 20 acres should be added to the estate, the Visitors have withdrawn the plans, and intend to limit the extensions to the building of a hospital for contagious diseases.

Nottingham Lunatic Hospital.—At the cost of £9,000 this asylum has been enlarged and various alterations and improvements introduced. The extra accommodation provided is for twenty patients of each sex.

As some patients pay only 8s. per week for the admirable accommodation and treatment to be obtained at The Coppice, it is evident that this lunatic hospital is doing a good and admirable service to the poorer middle-classes requiring asylum care.

Portsmouth.—Various improvements have been effected during the year, and so much has been done to bring this new asylum into good working order that the Commissioners express their belief that it will ultimately take a high position among public institutions of a like nature.

Richmond District Asylum.—Of 1,041 patients in the asylum at the end of the year no fewer than 511 were considered probably curable. This fact alone shows how different the types of insanity are in Dublin and London. In most English county asylums only some 10 to 20 per cent. of the patients are considered curable.

Dr. Lalor reports:—"At the present moment we have only nine single rooms for 500 female patients in the old house, and of these there are rarely more than two employed. They are, I may say, used altogether at night, and only for a short time, to prevent patients who may become noisy from disturbing the repose of their fellow-patients.

"Such results . . . . are, I believe, mainly due to the judicious employment of the patients, which is, I may say, universal, and has taken the place of directly repressive measures.

"Refractory or disorderly wards are unknown here, as being out of character in an institution where all are expected to be orderly. In the few exceptional cases where patients, by noise or irregularities, disturb or set a bad example to their fellows, such are at once removed either to the recreation ground, if the weather be fine, or to one of the large dormitories, if it was not so, and they are then walked about in charge of an attendant till the period of excitement has passed away. Seldom are there two such cases at the same time."

This reveals an amount of peace and tranquillity that is wonderful, and probably does not exist in the general population. Possibly a course of treatment under Dr. Lalor would be found to be highly beneficial to those gentlemen who have caused so much political excitement and noise during the last few years. We Englishmen and Scotchmen certainly do not understand insane Irishmen, at least we fail in soothing them as Dr. Lalor does. Speaking generally, it is absolutely true that the most noisy, discontented, irritating and troublesome patients in county asylums are Irish, and the same holds good for ordinary hospitals. How is this to be explained?

Roxburgh, &c.—The following remarks by Dr. Grierson on voluntary patients are so true and so well put that we reproduce them in the hope that all persons responsible for the management and the reputation of public asylums will take warning and avoid such cases as they would shun death. Our experience is that the more solemnly a voluntary patient swears that he will reform the stronger is his intention of availing himself of the very first opportunity to become hopelessly drunk.

After trying various hydropathic establishments, spas, &c., &c.,

Dr. Grierson's case placed himself under restraint voluntarily. "As is too often the case in our experience, and I believe in that of most, little benefit is derived by the one, so little credit accrues to the other of such contracting parties. Thus it was in this. Under promises readily given, but with no thought or intention of their being other than purposeless and delusive, he or she prevails over the one member of the family who has suffered least by his or her misdoing, and all appeals—appeals to medical belief, appeals to a past but sad experience—are set at nought; another chance must be given in accordance with the better knowledge of the all-but stranger, and that at once. The end is nearly unvaryingly the same, and soon told. Before night, with the opportunity, which is rarely wanting, he is beyond hope, helpless for self-care, and if not an actual danger, certainly an unbearable nuisance to the public. Lucky for him it is if his disposition and antecedents are known in the neighbourhood—on this account commiseration is felt for him, but often more for the misplaced confidence of those in whose charge he is still believed to be; friends are made acquainted with the danger, and to avoid a scandal these appear, not in time to save another downfall, but an unintentional self-death perhaps. No one wishes to deal with such a case more than once, or at most twice, and unhappily, after having tried and wearied every establishment by this playing at treatment, while good was possible, fate, rarely baulked, now interposes and sentences him to a life of uselessness and unbroken restraint."

Salop and Montgomery.—Once the improvements and enlargements are effected, those who formerly knew this asylum will scarcely recognise it as the same place.

A second assistant medical officer has been appointed, to relieve Dr. Strange of much extra work thrown upon him. Only 30 of each sex go for walks beyond the asylum walls. We agree with the Commissioners in the opinion that this seems a small number.

A fire broke out in the blacksmith's shop, and at one time threatened to become alarming. It is greatly to the credit of the staff that it was extinguished by their unaided efforts, and so orderly and quietly was everything done that not a single patient was aware of the fire until the following morning.

Concerning beer in asylums so much humbug and nonsense has been written that we warmly thank Dr. Strange for the following remarks. We were tempted to say something very similar long ago, but refrained from doing so simply to see how far the craze would go:—

"The question of giving beer and stimulants in public institutions as asylums and workhouses, has been forced before the public very much of late years. As in most controversies the arguments used for and against the use of alcohol in one or other form, are exag-

gerated and misleading. It is not my province to deal with the question in reference to workhouses, and my remarks apply solely to asylums. When I see in the reports of asylums statements of the excellent results arising from the disuse of beer, that greater quiet and an altogether higher tone prevails, and *almost* an assertion that the proportion of cases is relative to the use or disuse of beer, I am startled to think of the mighty evil that must still be worked in those asylums whose superintendents are not apostles of teetotalism; but calm reflection will, I think, show that the immense advantage claimed from the disuse of beer cannot in common sense be credited. Will any sensible person believe that half a pint or a pint per day of asylum beer, the very weakest possible, can do any harm? Even grant that it does no real good, it is simply, in my opinion, absurd to suppose it can work an evil. In this asylum, wishing to grapple with the question fairly, after consultation with the Visitors, and with their approval, the following regulation was adopted, viz., that beer should only be given to real working patients and by medical order. To deprive the artizans, farm workers, laundry women, &c., of their beer would, I think, be unwise, but I see no reason for giving beer to a lot of idle imbeciles and dements."

St. Luke's Hospital.—Surely an effort might be made to make this report somewhat fuller and more interesting. The lists of officers and governors occupy much more space than the medical report.

Somerset and Bath.—The Visitors have entered into a contract for the erection of a separate building for 80 females, at a cost of £7,957. The work is in progress. They report that much has been done by Dr. Wade to reorganise the asylum.

Patients continue to accumulate in spite of all that is done by sending the harmless to workhouses and to the care of their friends.

During the spring a severe outbreak of typhoid fever and erysipelas occurred. Twelve patients, two nurses, and the workmistress were attacked by typhoid; six died. Steps have been taken to effect three most desirable objects: (1) to diminish the overcrowding, (2) to improve ventilation, and (3) to rectify all defects in the drainage.

The report by the Commissioners in Lunacy is not given.

Stafford. Stafford.—This asylum is also full. In anticipation of the addition to the numbers on the opening of the new block for females, another assistant medical officer has been appointed.

Mr. Pater's report is an unusually short one, and extends to only two pages.

Stafford. Burntwood.—The Commissioners report a substantial improvement in the condition of this asylum. They also notice that the number of attendants and nurses is low. On the male side it is in the proportion of one to 16·2 patients; and on the female side one to 16·3.

Surrey. Wandsworth.—Seven cases of typhoid occurred during the year. Although the water was analysed, and the drains thoroughly examined, no cause for the outbreak could be discovered. Although the disease disappeared, it is probably only for a time, and it will return when circumstances are more favourable. It may be considered certain that typhoid does not break out in a public institution without cause, and that the cause will be discovered if looked for long and carefully.

The asylum is quite full. Although 59 patients were transferred to other asylums, occasionally new cases were refused admission for want of room.

Surrey. Brookwood.—The Visitors report that: "The whole of what are termed the old cases have been re-investigated, that is to say, the case of every patient (some of whom have been at the asylum ever since it opened in 1867) has been gone into afresh, in order that there might be no possibility of a patient being allowed to remain merely because he had been considered to be incurable. It is a matter of congratulation that no such case could be found; at the same time, it became evident that several had settled down into perfectly harmless patients, who simply wanted a moderate amount of care. Some of these we induced their relatives to take charge of, and others we sent to the workhouses." In spite of such discharges, there has been a great pressure for accommodation.

Dr. Barton appears to be directing special attention to the outdoor employment of his patients. The Commissioners state that they cannot too highly commend the result of the management in this direction. Leaving out those exclusively engaged as ward-cleaners, 80 per cent. of the men and 49 per cent. of the women can take part in the work of the asylum. Even some women, between 50 and 60, were employed in field work during the summer, and although they did little, they benefited by the change.

Sussex.—To provide room for recent cases it has been found necessary to get rid of a large number of patients (65) by sending them to workhouses or by boarding them with their friends. By this means the further provision for county patients admitted of postponement. The Visitors, however, are obliged to report that this transfer of harmless cases to workhouses has necessarily produced a marked deterioration in the general character of the patients, as they are mostly replaced by those of a violent, maniacal, and suicidal nature, thus involving increased anxiety and difficulty to the staff in their management, and an increase in the expense of their management.

Dr. Williams reports that the experiment has so far been successful. Out of 80 patients so discharged only eleven have returned. He says further that he "is fully conscious of the nice discrimination required in carrying it out. He is unwilling to admit that any case

of insanity, unless involving organic changes in the brain, is hopelessly incurable, and he therefore sees the impropriety of transferring cases to the workhouse in whom there is any chance of recovery. Such a step is wrong, both from a humanitarian and from an economic point of view. At the same time he is convinced that it is a mistake, in many instances, to keep some cases too long in asylums, as he has often seen much benefit accrue from change. There is no point, however, in the whole range of medicine more difficult to decide than which cases are best in asylums, and which will benefit by change. It has occurred that discharged patients have been returned to the asylums respecting whom it was confidently anticipated they would do without control, whereas, on the other hand, it occasionally happens that others, whose friends have removed them contrary to medical advice, have derived decided benefit from the change. It is only by a careful study of each case that a correct prognosis can be arrived at." And, we would add, not even then.

Wilts.—The estate has been enlarged by the purchase of 26 acres.

It is well known that the sanitary state has not been satisfactory. Typhoid fever has been endemic for a long time. At last the cases became so frequent and so serious that the Visitors had the drains, &c., inspected by a competent sanitary engineer. So many and grave defects were discovered that the Visitors applied to Quarter Sessions for a grant of £2,000 to execute such drainage and other works as may be found necessary.

Wonford House Hospital.—Under Dr. Philipps's direction this institution appears to be in the process of thorough renovation. The progress already made and the results are so evidently satisfactory, financially and otherwise, that the Governors have raised his salary £150 per annum. The Commissioners report that the Wonford House contrasts favourably in point of comfort with any hospital which they inspect.

Worcester.—It is proposed to build an annexe to accommodate 210 patients but capable of extension for double that number.

In his report Dr. Cook enters at length into the cause which has raised the asylum population from 210 in 1853 to 772 in 1882.

Yorkshire. East Riding.—Although this is a modern asylum, its sewage arrangements appear to have received little attention from the architect. It would have been difficult for matters to have been in a worse state than they were when examined by Dr. Macleod. He reports :—

"In February much trouble and annoyance was caused by the drainage and sewerage of the asylum. The whole system broke down at once. The sewerage in itself had many drawbacks. The sewers were very inaccessible, and were placed in and across buildings. Closets were situated where their presence could only be a source of danger, and the lavatories and baths discharged their waste directly

into the sewer, with only the intervention of an imperfect water trap. The workmanship also of the drains, &c., was found in many places very imperfect. Pipes were fitted loosely into each other without clay or cement in the joints (and this inside the building); some of the ends of the drain tiles barely touched the sockets of the next tile, into which they ought to have fitted. Pipes from baths and lavatories were pushed into sewer drains, and a few handfuls of mortar roughly plastered round them. The main sewer is in many places laid ten feet deep, in stiff clay, which had to be dug through, a most disagreeable task, for the diggers had, while at work, often to stand in two feet of water and liquid sewage. The tenacious and unabsorbent character of the soil on which the asylum is built, alone prevented an accumulation of sewage under wards and corridors."

Fifty-one acres of land have been added to the estate, and a walk of nearly two miles is to be made round the grounds.

Yorkshire, South.—Additions continue to be made to this already great asylum. During the year its population increased by 77. The work thrown on the medical staff must be enormous, for there were 526 admissions, 325 discharges, and 124 deaths during the year.

Dr. Mitchell reports favourably of sending chronic cases to workhouses. He says:—"In passing I may remark that this plan of removing the quieter sort of incurable cases to our union workhouses has answered very well. In well-conducted workhouses, which (especially the larger of them) now constitute the greater number, the imbecile inmates are well cared for—have such medical care as they require, and are indeed as comfortable as they would be in asylums. They enjoy many privileges they cannot look for when confined in asylums—the chief of which is the frequent opportunities of visiting their friends, in whose neighbourhood they still, as a rule, reside. When removed to asylums this point of interest in their lives—to which they had accustomed themselves to look forward—is withdrawn; and in many instances I have found that no compensation an asylum can offer will weigh in the scale against this lost and highly prized privilege."

Yorkshire. West Riding.—The asylum at Wakefield is unable to admit all the cases which should be sent there; the surplus being admitted at Wordsley.

Sanitary arrangements receive continual attention. When they are completed it is hoped that attacks of dysenteric diarrhœa, which appear from time to time, will cease.

PART IV.—NOTES AND NEWS.

THE ANNUAL GENERAL MEETING OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION, 1884.

The Annual Meeting of the Medico-Psychological Association was held on Wednesday, 23rd July, 1884, at the Royal College of Physicians, London, Dr. Rayner presiding. The following members and visitors were present:—Drs. J. Adam, J. Bayley, G. F. Blandford, David Bower, Stanley Boyd, J. C. Bucknill, Fletcher Beach, David M. Cassidy, Crochley Clapham, J. A. Campbell, T. B. Christie, T. A. Chapman, E. Maziere Courtenay, H. Campbell, J. Langdon Down, F. Pritchard Davies, J. V. de Denne, G. S. Elliott, J. E. M. Finch, Bonville B. Fox, J. R. Gasquet, J. Tregelles Hingston, W. R. Huggard, Octavius Jepson, Henry Lewis, J. Murray Lindsay, H. Rook Ley, J. A. Lush, Baron Mundy (Austria), H. C. MacBryan, W. J. Mickle, T. W. McDowall, G. W. Mould, F. Needham, H. Hayes Newington, Chas. H. Nichols (New York), J. H. Paul, S. Rees Philipps, G. H. Savage, H. Stilwell, J. Beveridge Spence, James Stewart, D. Hack Tuke, D. G. Thomson, A. R. Urquhart, T. Outterson Wood, Francis J. Wright, Henry F. Winslow, D. Yellowlees, &c.

Dr. Rayner, on taking the chair at the morning sitting (Dr. Orange being unavoidably absent), said that they would be glad to learn from a letter which he submitted that Dr. Manley, who they had at one time hoped would have taken the chair that day, was improving in health.

Dr. Murray Lindsay moved a vote of thanks to Dr. Orange, the retiring President, observing that they all remembered the very able and interesting address which Dr. Orange had given them last year, and fully recognised what an excellent President Dr. Orange had made.

Dr. Needham seconded the motion, which was carried by acclamation.

Dr. Hack Tuke submitted the minutes of the last annual meeting, which were printed in No. CXXVII. of this Journal (October, 1883).

The minutes having been taken as read, were confirmed.

Dr. Campbell proposed a vote of thanks to the Editors of the Journal. The Editors had very arduous and often thankless duties, and discharged them in a most judicious way. If he might make a suggestion, he would venture to say that he thought it would be very desirable if the names of the members of any standing committees could be given after the minutes of the present meeting. It would also be convenient to have the Index Medico-Psychologicus so numbered and paged that it might be bound up as a whole at the end of each volume.

Dr. Mickle said that the work of the Journal had increased each year with the increased number of members of the Association, and the duties became each year more and more difficult, requiring greater care on the part of the Editors. He was sure they all felt that the Editors performed those duties in the most efficient manner, and he had therefore very great pleasure in seconding the motion.

The motion was then carried

Dr. Hack Tuke said that Dr. Savage and himself would very much appreciate the vote of thanks. It was a great help to them to know that their efforts were appreciated by the members of the Association. He hoped it was not at all implied that the editing of the Journal was perfect. The Editors were well aware that there was room for improvement, and they would only be too glad if at any time members would make suggestions. He was very pleased that Dr. Campbell had made suggestions. As far as he

could see at present, they were good suggestions, and if his co-editor agreed, he thought they might be carried out.

The TREASURER, (Dr. Paul) submitted the balance sheet of the accounts for the past year, which will be found on the next page, the same having been duly examined and certified as correct by the Auditors.

Dr. LANGDON DOWN proposed a vote of thanks to the Treasurer, observing that they could not be unmindful of the many years that Dr. Paul had filled that office with great efficiency, nor could they omit to bear in mind Dr. Paul's kind efforts in introducing them to their agreeable annual dinners.

Dr. PHILLIPS seconded the motion, which was carried.

Dr. PAUL, in response, said that his work had always been a labour of love. He had now been connected with them as their treasurer for 21 or 22 years, and so long as he should be spared to fill that office it would always give him very great pleasure to assist the members of the Association when they came to London.

Dr. JEPSON moved a vote of thanks to the Secretaries. The secretarial duties were no doubt both onerous and irksome, and it was almost impossible for a secretary, however well-meaning he might be, to please everybody but the secretarial duties were most admirably performed, and their recognition of this was especially due at the present time, when, in addition to the work of the General Secretary, Dr. Rayner had, greatly to their satisfaction, undertaken the office of President.

Dr. DAVIES seconded the vote of thanks, which was put to the meeting by Dr. Hack Tuke, and carried with acclamation.

Dr. RAYNER thanked the Association most sincerely and heartily for the vote of thanks, saying that it had been a great pleasure to him to carry out his secretarial duties, which he should be pleased to continue to discharge during his Presidency.

Dr. RUTHERFORD, Secretary for Scotland, begged to thank the meeting very cordially for the vote of thanks, adding that owing to the prompt way in which Scottish members paid their subscriptions he could not say the duties of his office were very onerous, but they were always agreeable.

Dr. COURTENAY, the Secretary for Ireland, also acknowledged the vote of thanks.

On the motion for the appointment of officers and Council for the ensuing year,

The PRESIDENT explained the mode of voting, and nominated, in accordance with the rules, the three following gentlemen to act as scrutineers, viz. :—Drs. Yellowlees, Courtenay, and Hayes Newington.

The lists having been collected, the scrutineers retired to examine them, and subsequently reported that the nominations of the Council had been unanimously supported with the exception of two suggestions as to alterations in the names of members of Council, whereupon the following gentlemen were declared by the President to be duly elected as

OFFICERS AND OTHER MEMBERS OF COUNCIL OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

YEAR 1884-5.

PRESIDENT-ELECT	J. A. EAMES, M.D.
TREASURER	JOHN H. PAUL, M.D.
EDITORS OF JOURNAL...	D. HACK TUKE, M.D. G. H. SAVAGE, M.D.
AUDITORS	J. MURRAY LINDSAY, M.D. W. J. MICKLE, M.D.
HONORARY SECRETARIES	E. M. COURTENAY, M.B. For Ireland. J. RUTHERFORD, M.D. For Scotland. H. RAYNER, M.D. General Secretary.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Treasurer's Annual Balance Sheet, 1883-84.

RECEIPTS.

	£	s.	d.
To Balance—Cash in Hand	263	5	9
To Subscriptions received	232	1	0
By Secretary for Ireland	31	10	0
By Secretary for Scotland	46	4	0
By Sale of Journal, Messrs. Churchill	132	0	0
By Interest on £205 7s. 10d. 3 per cents.... ...	6	0	8
	£711	1	5

EXPENDITURE.

	£	s.	d.
By Annual and Quarterly Meetings	13	9	0
By Expenses of Reporting at various Meetings ...	12	13	8
By Editorial Expenses	12	12	0
Printing, publishing, engraving, advertising expenses, and postage of Journal ...	394	1	0
Prize—Dr. Wiglesworth	10	10	0
By Sundry Expenses, Advertisments, &c.	7	3	6
By Treasurer	6	6	0
By Secretary for Ireland	0	9	9
By Secretary for Scotland	5	5	0
By General Secretary	1	17	9
By Balance in Treasurer's hands	246	13	9
	£711	1	5

Examined and found correct,

J. MURRAY LINDSAY, Auditor.

Royal College of Physicians.

July 23rd, 1884.

J. H. PAUL,

TREASURER.

MEMBERS OF COUNCIL.

DAVID YELLOWLEES, M.D.	D. M. CASSIDY, L.R.C.P.Ed.
W. BEVAN LEWIS, L.R.C.P.	HENRY STILWELL, M.D.

Dr. YELLOWLEES said that now the election of officers and Council was over he wished to refer to the balloting list sent out. He was not quite sure that it could be accurately called a balloting list. Although members were invited to alter any names, yet he thought they would not like to do this, from the feeling that it might involve some supposed slight on the name struck out or in some degree reflect upon the Council. He thought that much more choice should be given to members than at present was the case, and with this view he would suggest that—taking the post of President for example—instead of giving only one name, the Council might submit three names. In the same way with the members of Council—instead of four names, eight might be given. Thus, the members might be enabled to exercise their judgment on the balloting list without any invidiousness at all, and without appearing to reflect upon anyone.

Dr. LEY said he would second Dr. Yellowlees' proposal.

Dr. CAMPBELL having suggested that the rule bearing upon the point should be read,

The PRESIDENT read Rule 2 in Chapter 9 of the Rules of the Association viz:—"Balloting lists of the members recommended by the Council for office, shall be prepared and transmitted by the Secretary to each member with a notice of the annual meeting. Opposite the names recommended by the Council shall be a blank space for any other names which the member using the ballot paper may prefer." The President added that he thought the rule would admit of the alteration suggested.

Dr. YELLOWLEES thereupon moved that it to be a recommendation to the Council that the lists be made up in the way suggested—the names to be put alphabetically.

Mr. MOULD asked Dr. Yellowlees to add to his recommendation that any member of the Association who should send up a name should first ascertain whether the member he suggested would serve.

Dr. CAMPBELL said that he did not think it had ever been the rule to ask members beforehand.

Dr. YELLOWLEES said he thought they must keep within the lines of the rule. The rule definitely put it as the duty of the Council to prepare balloting lists, and it was open to anyone to write to the Council saying—"Please put in such and such a name." His suggestion was quite within the rule, only giving the latter a wider application.

The PRESIDENT pointed out that the election must take place at the annual meeting. If it should happen that the member elected as President did not serve the election would then fall upon the Council.

Dr. JEPSON said that if Dr. Yellowlees' recommendation were carried out he thought that the Council should have the privilege of saying—"There are so many names. We suggest that those specified be elected." What otherwise would be the use of the Council in the matter? He thought the Council should have that left in their hands.

Dr. NEEDHAM said that as he understood the proposal he thought it would be exceedingly invidious to subject any of these gentlemen named to rejection by the members. It would probably be the general feeling of everybody present that they would greatly prefer to remain in obscurity than to be dragged into a position they did not seek.

Dr. HAYES NEWINGTON suggested that the opinions of the members might perhaps be elicited by communications to the Council.

Dr. CAMPBELL said that if so it would be best to issue a circular.

Dr. CHRISTIE said he thought the proposal would involve change for the worse. If three names were put forward they would be having committees formed and canvassing, and the Association would degenerate. No one would care to have his name put forward and circulars sent round asking members to support him. They had had good men as Presidents, and the present proposal was being brought forward without any grounds to support it. It would result in Scotch members uniting for one purpose, English members for another purpose, and Irish for another. The objections to the course proposed would hold good also in regard to the other officers. Surely the editing of the Journal would not be benefited by such a rule. He thought the matter was best left in the hands of the Council. Moreover, ought not notice to have been given of this ?

The PRESIDENT said that it would scarcely involve a fundamental alteration of the rule, such as would require previous notice.

Dr. DOWN said that there were two methods of election: one being that followed at the Royal College of Physicians, where all present wrote down the name of the gentleman they wished for President, and the other the method adopted by this Association, as well as by some of the other Medical Associations. Looking back upon the past, he did not think they had any cause to find fault with their present system.

Dr. YELLOWLEES said that they ought not to be dictated to by their own Council. There was a blank line to write in, but members knew that they could not alter the name if circumstances arose which should make them wishful to do so. He therefore suggested that there should be given not one name, but several names, and that those names should be given by the Council irrespective of any canvassing of the popular vote. It was the business of the Council to do this' but it was not their business to tie the hands of the members. He therefore laid his suggestion as a formal proposition before the meeting.

Dr. NEEDHAM said he agreed with the principle but not with the method of Dr. Yellowlees' proposal. He would propose as an amendment that the Secretary should, some time before the annual meeting, send out to the members of the Association a request that they would send in the names of any gentlemen whom they wished to propose as their President and officers, and that the Secretary should then frame a list to be presented to the annual meeting for confirmation or otherwise; but that the names of those gentlemen who would then become competitors should not be published.

Dr. CHAPMAN said that if the Council recommended A, the Society would take A, and when next time they recommended B, who would have been twice on the list, B would be chosen. It would come to this—that the Council would have to place names on the list in rotation, and decide on Presidents beforehand.

Dr. LUSH said that they had better leave things as they were. He could not vote for Dr. Yellowlees' proposition, nor could he vote for the very troublesome amendment, so he would beg to move the "previous question."

This being seconded by Dr. DOWN, and the first amendment not having been seconded, the "previous question" was put to the vote and carried.

The PRESIDENT brought under the consideration of the meeting the question as to the place of the next annual meeting, and it was resolved, on the motion of Dr. CAMPBELL, that the next annual meeting should be held at Cork, in Ireland.

The election of ordinary members was then proceeded with. The balloting-box having been sent round, and there being no dissentient vote, the list was taken *en masse*, and the following gentlemen were declared to have been duly elected ordinary members, viz.:—L. R. Cox, M.D., Med. Supt. County Asylum, Denbigh; Ernest White, M.B. Lond., and M.R.C.P., Sen. Assist. Med. Off., Chartham, Kent; W. Beattie Smith, F.R.G.S. Ed., Yarra Bend Asylum, Melbourne, Australia.

The following gentlemen were elected honorary members of the Association, their qualifications being reported by Dr. Hack Tuke, viz.:—J. Workman, M.D., Toronto, Canada; J. Curwen, M.D., Warren, Penn., U.S.A.; Frederick Norton Manning, M.D., Inspector of Asylums, Sydney.

The next business being as to Committees,

Dr. HACK TUKE reported that during the past year it had not been found necessary to hold a meeting of either the Parliamentary or Statistical Committees.

The PRESIDENT said that he had to submit a recommendation of the Council that the Parliamentary Committee, if reappointed, should confer with the Parliamentary Committee of the British Medical Association, with regard to prospective legislation, and report to the Council, so that the two Associations might take combined action. After the conference, the Committee so appointed would report to the Council, who, if necessary, would call together a general meeting of the Association to confirm their resolutions.

Dr. CHRISTIE asked whether the Parliamentary Committee was still in existence.

The PRESIDENT said that it was reappointed last year.

Dr. CHRISTIE said he thought it was too large. This time there would be really work for them to do. He should propose that a Committee be appointed of seven members to confer with the members of the Committee of the British Medical Association.

Dr. CAMPBELL was in favour of the Parliamentary Committee being reappointed as it then stood. He thought legislation was not advancing at a very rapid pace.

Dr. DOWN said he understood that action was likely to be taken, and it was of vital importance that the Parliamentary Committee should be constituted at once, and of the best material. He thought it desirable that the size of the Committee should correspond with that of the British Medical Association, which he believed was seven.

After some further discussion, it was agreed that the Parliamentary Committee should be constituted as follows, consisting of twelve members, the names of whom were proposed and carried *seriatim*, five to form a quorum, viz.:—Dr. Lush, Dr. Blandford, Mr. G. W. Mould, Mr. H. Hayes Newington, Dr. William Wood, Dr. Savage, Dr. Clouston, Dr. Needham, Dr. Ringrose Atkins, Dr. Paul, Dr. Stocker, Mr. H. R. Ley.

It was further resolved, on the motion of Dr. MURRAY LINDSAY, seconded by Mr. HAYES NEWINGTON, that the Committee should appoint certain of their numbers to confer with the Parliamentary Committee of the British Medical Association, and report to the Council.

It was resolved, on the motion of the PRESIDENT, seconded by Dr. CAMPBELL, that the Statistical Committee be reappointed, and add to its present functions the consideration of the desirability of adopting a system of collective investigation of disease.

Dr. HACK TUKE reported that the adjudicators, consisting of the ex-President, the President, and the President-elect, had this year awarded the prize of £10 10s., together with a bronze medal, to Dr. S. Rutherford Macphail, Assistant Medical Superintendent of the Garlands Asylum, Carlisle, for his essay on "Clinical Observations on the Blood of the Insane" (see Original Articles, p. 378). Dr. Hack Tuke submitted a letter from Dr. Macphail, who was unable to be present, in acknowledgment of the award, and explained that the striking of the medal had been hitherto delayed until such an essay appeared as would justify the incurring of the expense. The first cost would ordinarily have been about £75 but as the Association already possessed a die for the stamping of diplomas, it would be about £30 to commence with, and it would afterwards cost about a pound for each striking.

The PRESIDENT said he was sorry that Dr. Macphail was not present to receive

the prize, which he very richly merited. He hoped the Association would continue the prize and bronze medal in future years, and that they would have a still larger number of good papers from competitors.

Dr. HACK TUKE said that with reference to his inquiries concerning the use of alcoholic liquors in asylums, he had engaged to read a paper on the subject at the Belfast meeting; but as so many of the members present that day would not be at Belfast, he thought it was only due to them, after giving them so much trouble, to read a summary of the results of his inquiries so far as he had been able to obtain them. Dr. Tuke then gave the substance of a paper which he subsequently read at the Annual Meeting of the British Medical Association.

The PRESIDENT said that Dr. Hack Tuke's very interesting summary would no doubt call for observations from the members, but as their time had all but expired, it would be best to defer the discussion till the afternoon.

AFTERNOON MEETING.

The PRESIDENT read his Address, which will be found at page 337 of this Journal (Original Articles, No. 1).

Dr. MAUDSLEY moved a vote of thanks to the President for his Address, remarking that so far as a general impression would go, he heartily coincided with most of the suggestions made. In regard to any steps which might be taken to bring about more careful proceedings for the admission of cases into asylums, he might say that he felt sure that they would not result in a cessation of the outcry against asylums. Taking the recent case of Gilbert Scott, which was a case tried before a Judge of the Supreme Court, with a jury, although, after a careful trial of three or four days, the jury were unanimous and the judge expressed his entire agreement with them, yet the newspapers, were not satisfied; and probably if every case were tried before a jury, still the public would not be satisfied. He was glad to hear the President's experience as to the use of sedatives in regard to insanity. It agreed with what he had himself said when he occupied the chair, that they were seldom useful, and sometimes positively mischievous. Before sitting down he might say that he hailed with pleasure the presence of a distinguished foreign honorary member of the Association, Baron Mundy. That gentleman would, he knew, have taken great interest in many of the points contained in the Address, and particularly in regard to the treatment of the insane out of asylums. In fact, when Baron Mundy was in this country he was an apostle of the cottage-system of treatment, and he would no doubt be pleased to recognize a very considerable modification of opinion since then.

Dr. HACK TUKE seconded the motion, saying that the Address was full of information, and likely to lead to a practical discussion. As Dr. Maudsley had referred to one distinguished visitor, he might be permitted to mention the presence of another, viz., Dr. Chas. H. Nichols, of the Bloomingdale Asylum, New York, who had been delegated to this Association from the Association of Medical Superintendents of American Institutions for the Insane.

The motion was then put to the meeting and carried with applause.

The PRESIDENT, in thanking the Association for their vote of thanks, said that he felt sure that it gave them all great pleasure to have their honorary members present, and he hoped that Baron Mundy would not fail to express some of his views in regard to the single care of patients.

Baron MUNDY said that, having to leave to attend another meeting, he would take this opportunity of thanking them for the reference they had made to his presence. He said that in France and other foreign countries the lunacy laws were not nearly so well regulated as in England, but there were commissioners appointed, partly from the Ministry of Justice, and partly from the medical corporations, who visited patients after a fortnight. In regard to the "cot-

tage" or "family" system, he said that France stood nearly where it did twenty years ago, although there was much talk there about "family" treatment, and some attempt at it. Norway, Italy, and Sweden were as before; and he was sorry to say that Austria was still behindhand, except in Vienna. In Germany progress had been made. He would call their attention to a report at the Copenhagen Congress relative to the system in question, which was working well on an estate which had cost about £30,000, and which had been bought for a lunatic asylum, but where the insane were living in the different houses which had been built before the inhabitants left. There were central infirmaries, but the system was a separate one. Half of the cost of the estate had already been repaid. It was proposed also to buy such an estate near Munich. From his experience, however, he was obliged to say that he did not think such a system could be carried out in England.

The PRESIDENT suggested that the adjourned discussion on Dr. Hack Tuke's paper might be taken at the same time as the discussion on the Address, as the subject was referred to in it.

Mr. MOULD said that the system described by Baron Mundy had been in existence at Cheadle for seventeen or eighteen years, where they had living in cottages many patients out of the main building of the asylum. He should like to bear his testimony to what Dr. Rayner had said with regard to the certificates. He hoped and believed that in the eusuing year those certificates would be modified or done away with—at all events in their present form. It was impossible to shirk the question. It was all very well for them to be afraid of a law which they knew to be bad in its inception and still worse when carried out. For several years he had, almost in defiance of the law, received patients as boarders without certificates. He had always taken the Commissioners to see them, and he must say that they had never interfered. The regulations were constantly broken, and by no class of people more than by the rich. A rich man's friends would say, "Cannot you allow a couple of nurses to come into the house?" or, "Cannot you do this or that?" but when it came to the legal question they would ignore all that, and help in the prosecution. Only think of the harm which those certificates did! In the case of a man in excellent business it actually took away his means of living. He could mention a a case in which the friends interfered, fearing that the patient's future would be ruined, and the man died insane. He hoped that, when the Parliamentary Committee met, some other mode would be hit upon of placing a patient in an asylum. He fully agreed with Dr. Rayner's suggestion, that a patient should be sent to an asylum for a short definite period, and that in that period he should be visited to see whether he should continue under care and treatment. That would do away with the disadvantages of the existing state of things. He had felt the utter inutility and positive obstruction of the certificates, and protested against treatment of patients by simple Act of Parliament, instead of by common sense. He had, at the present time, the good fortune to be indicted for a conspiracy. He had received a patient who was discharged and brought an action against the two medical men who signed the certificates. The action was quashed, and because he had received that patient he had been indicted for conspiracy. Of course it was for him to show *bona-fides*, and he hoped to show also the absurdity of the law which allowed a public officer to be indicted and put to a great expense simply for doing his duty.

Dr. SAVAGE said he had always felt the great importance of having some "house of rest" to which patients could be taken at once. There was no doubt that Mr. Mould broke the law habitually, and the older he (Dr. Savage) grew, the more he felt inclined to break it. Cases were brought in which he thought humanity necessitated it. Only last week Dr. Maudsley sent a patient to Bethlem, quite maniacal, without any certificates whatever, and said—"See what you can do with this patient." He took the patient in. Of course he

got the certificates by that evening; but consider the position. There was a maniacal patient with only a feeble old woman in the cab with her. That often happened. Unfortunately, there was another side to it. Even if they had a house of rest, something also was required in the way of power to compel dangerous people to be retained. Two cases had occurred in his own experience within the week, which were of grave import. A patient admitted into Bethlem in consequence of acute mental disorder following upon delirium tremens, got sufficiently well to understand his business relationship, and his friends said, "We will take him out at once. His business is interfered with." I said, "It is a temporary calm. I am sure he will have a relapse." The patient was perfectly sane. His friends would not believe the medical opinion. He was taken out: an indemnity was given by his wife, and within two or three weeks he killed her. Another patient was taken out under almost precisely similar circumstances. The friends were warned, but they would not believe medical advice, because the patient answered so reasonably. An indemnity was given, and that patient killed himself. Accidents of this kind would occur, and he was afraid he was inclined to look rather easily upon suicidal ones; but if they were to have a house of rest, they must have some arrangement giving power of detention. As to special certifiers, that would be of the greatest importance; not because the man who signs usually loses a friend, but because there were many cases in which ordinary medical men had no right to sign a certificate. They were told so and so by the friends, but the symptoms put down in an immense number of cases were worthless and misleading. Of course, the Commissioners were doing their best, and they had much more to do; but patients themselves complained that they were sometimes three or four or five months in an asylum without been seen by the Commissioners. Perhaps patients would never be satisfied; but it was just that within a certain time of admission—say within three or four weeks—patients ought definitely to be seen by a State-expert. He could not agree with Dr. Rayner altogether about the dietary. He did not believe—although Dr. Rayner spoke as though he regarded it as likely—that Dr. Rayner thought that the dietetic value of food was to be judged by the mere analysis of it. He should be very sorry to see the time come when patients would be fed according to the amount of nitrogen, hydrogen, or carbon which the food contained. There were some present who felt strongly that there was scarcely a county asylum where the dietary was satisfactory. There would always be many difficulties, and he was afraid there would always be some hotch-potch in the food. He quite agreed with Dr. Rayner that the age of quieting patients by narcotics was coming to an end, but he trusted that the pendulum would not swing too much in the other direction. There were cases in which he believed that treatment of a very severe kind was useful. They might see at Bethlem shaven scalps, and even blistered scalps, and he remembered cases which had improved under that treatment. The same with narcotics. If they had a sharp weapon it might be either extremely useful or dangerous according as they knew how to use it; and because it might be dangerous he hoped they were not going to exclude the fact that it might be extremely useful.

Dr. Bucknill said that he thought the Address was a very able one, but he never heard one with which he so generally disagreed. On certain points which were being referred to when he entered the room, he would reserve his opinion. In regard to the very interesting points touched on subsequently, he must say first of all that he cordially agreed with what Dr. Savage had said with respect to treatment. He was glad to hear him say that shaven scalps and blistered scalps could be seen in his wards, for he (Dr. Bucknill) had seen them there, and he thought he was, to some extent, responsible for that. It was one of those things which, under certain conditions, did so much good; but they were now so much afraid of responsibility that, as a rule, they had left off

that and other treatment which was beneficial to recovery. They thought too much of what the outside world thought, and were apt to forget that the greatest benefit which they could confer upon a lunatic was to cure him by any means available. He also begged respectfully to refer to the use of narcotics, and especially of morphia. Judiciously used, morphia was one of the best of remedies, and to have a kind of general discredit thrown upon it in the present Address, and also in the Address by Dr. Maudsley on a former occasion, was, he thought, a very mischievous thing. What was to be avoided was the giving of narcotics for the purpose of quieting patients; but to say that they should not be given for curing patients, was a dangerous doctrine and a retrograde one. He agreed as to certificates. The whole thing was wrong. As to the law of "two medical men separately," what could be more absurd? It was the entire reverse of what took place in the case of bodily disease. There concurrent examination was made; but in lunacy each medical man must examine separately, and so the public lost the advantage and security which would be attained by two or more conscientious men examining together. He agreed entirely also with the suggestion that had been made that there should be an intermediate house, as distinct from the asylum; in fact, he thought that the more they treated insane patients on the same lines as patients were treated in hospitals the more they would be honoured, and the better the public would eventually be satisfied.

Mr. HAYES NEWINGTON thanked Dr. Rayner for the kind opinion he had given as regards private asylums. Examination by a Government official was, on the face of it, a very wise thing, and would satisfy the public; but the question was—What was their duty? Was it to satisfy the public, or was it to do the best thing they could for the patient? Would the proposed examination be for the benefit of the patient? Such an examination would be called for only in one case out of ten; but taking that one case, what would be the result? He could honestly say, from his own experience, that the visits of the Commissioners had much prejudiced the recovery of the patient. Suppose the somewhat doubtful case of a lady who had the idea that she was well, and who was much worried by the difficulty she had in getting the doctor to see that she was well. As long as she had the hope of proving herself right and the doctor wrong, she would be at great pains to benefit herself. The Commissioners would come, and would, unfortunately, be obliged to think the same as the doctor, and the patient would begin to rave at once. Then, too, what Government official would ever take the responsibility of saying that two medical men were wrong? He did not see how any Government official in a fortnight would, in the face of two medical men who knew the circumstances of the case, say that they were to be discredited, and the patient set right. Then what was to be done? Possibly he might be thought foolish in saying it, but he did not see that anything had to be done. Perhaps a few trifling alterations might be made in the law; but the best cure for ill-doing was to be found in the fear connected with the responsibility for such ill-doing. Mr. Mould had taken great credit to himself for law-breaking; but if his *bona fides* were not so well proven he would find it a very severe responsibility to break the law. He did not, however, think that they need throw on one side the suggestion as to the magisterial inquiry. He had always held that if the Commissioners were empowered to write confidentially to many of the public servants of a town in the country—say to a Justice of the Peace—the very Justice of the Peace before whom the examination took place—making inquiries as to the family and other circumstances connected with the patient, and the public knew this, it would go a very great way to allay dissatisfaction. He thought they were all too much disposed to run after the "liberty of the subject." This was, of course, sacred to every Englishman, and it required very serious neglect of duty to cause a person to be deprived of his liberty. It seemed, however, to be forgotten that liberty was not a present made unconditionally to every man, but that it had its duties as well as its privileges; and he thought

that the liberty of the friends of the subject was vastly more interfered with by the insane patient than the liberty of the patient was by the friends.

In reply to inquiries by Dr. Bucknill and Dr. Hack Tuke, Mr. MOULD said that he had never broken the law in the sense of detaining patients, without certificates, for profit. He had kept patients from going to an asylum, under certificates, by treating them at their own homes with the aid of their medical men. He had done this sometimes in order to prevent them being thrown out of their business. Only the other day he saw a gentleman who would have been thrown out of his firm if he had been certified. The law, as it at present stood, allowed a person to be suspended at once from his business. He had gone even further. He had frequently, with the full consent of his colleagues, allowed patients to take such active part in their business as would prevent its being lost. In hospitals they were allowed to take "boarders." It was for the superintendent to determine whether these persons were so insane as to need certificates, or whether they required simply a certain amount of control and supervision. He had at the present time something like forty or forty-two boarders. All of them had been seen by the Commissioners, and all were patients staying on of their own free will. He referred also to a case of a lady whom he had detained against her will for a little time.

Dr. CAMPBELL said he was very pleased to hear Dr. Rayner's remarks with reference to imbecile children, whom it was very wrong and improper to send to adult asylums. He had last year a child of eight years of age, and sent the child away. He thought it very hard that an imbecile, who had the misfortune to be epileptic, should be excluded from the imbecile asylum. He was also pleased with Dr. Rayner's remarks on dietary. He thought that the dietaries of public asylums required very much improvement. There should be a summer diet and a winter diet. The amount of fruit and vegetables given to pauper patients was not enough, and the monotony was most wearisome. As to treatment, many might differ from the views expressed both by Dr. Rayner and Dr. Bucknill; but the truth could be arrived at only by discussing the treatment, and they ought all to combine in inquiry as to its relation to recovery. They had not enough data to come to any conclusion about it. In regard to blistering, which Dr. Savage seemed to take to himself considerable credit for, many of them had not as yet come to a conclusion as to the cases it was good for. He thought that they should, at their quarterly meetings, put down some one subject of practical value for discussion, and give their experience. That would conduce very much towards their advancement in knowledge in regard to medical treatment.

Dr. FLETCHER BEACH said he quite agreed with what Dr. Campbell had said about their not being able to take into the imbecile asylum imbeciles who had the further misfortune of being epileptics. It would be of very great advantage if they were allowed to take in patients who were only or also epileptic. At present they were obliged to return such patients. He believed there was a place in the North of England for epileptics alone, but not in the South of England. What happened now was that a child would be removed from one place to another, and perhaps became an imbecile when he would not otherwise have become so.

Dr. YELLOWLEES said that they were supposed to have some peculiarities in Scotland as to lunacy. Their certificates there were endorsed by a legal functionary, the Sheriff, and the result was that they had less grumbling on the part of the relatives, and on the part of the patients themselves. It was his familiar conclusive reply to a patient, "The Sheriff has sent you here." That position was one which shut up the patient, so to speak, and satisfied the friends, and he did not believe that any subsequent examination by a certifier, no matter who he might be, would equally satisfy patients or their friends. He thought that the certifier would be suspected by the public. Some people were never satisfied; and if the certifier were a medical man they would not be much nearer to satisfying this section of the public. The Scotch method was really

therefore answering very well. The patient did not appear before the Sheriff at all, and he must say that sometimes the Sheriff endorsed cases which he (Dr. Yellowlees) would not have received. In Scotland the superintendent of the asylum at once signed a certificate of emergency for the patient, which certificate was valid for three days, thus allowing ample time to communicate with the friends and make other inquiries. The emergency certificate was therefore most valuable. Then the other difficulty, referred to by Dr. Savage, was provided for. In Scotland the friends could not remove a dangerous patient without the consent of the medical superintendent. The mode in which the medical superintendent exercised that power was that he would communicate with the Procurator Fiscal to the effect that a dangerous patient was about to leave the asylum, or rather he would say to the friends, "You may, if you please, take the patient away; but I must acquaint the Procurator Fiscal, who will arrest the patient." That threat was, of course, enough, and he had in only one case had to ask the Procurator Fiscal to arrest the patient. He was very pleased to hear what Baron Mundy told them; but the same thing had been done in Scotland and elsewhere. They would all recognise what Dr. Rayner had said about the increasing requirements of accommodation for lunatics; but he believed they were on the wrong tack, and that until they had got small curative asylums, containing not more than 200 or 250 patients, they would not be able to fight lunacy as they ought. It was only in that way that the curable patients would get a fair chance of recovery, and that the terrible incubus of incurable patients would be lifted away, so as to enable medical officers to do their best for the cure of the others. He very much appreciated the energy and antithesis with which Dr. Bucknill had spoken; but he was not prepared to go that length. He did not at all understand Dr. Rayner to speak of treatment by, but of the misuse of, narcotics. He would very much like to hear more about another point touched upon in the Address. If there was one bit of practice which had assumed to him a greater definiteness than any other, it was that dipsomaniacs should not get stimulants unless their physical condition absolutely required it. He formerly thought that there were no conditions where alcohol was required, but he now thought there were cases in which it was needed.

Dr. STEWART said that it was impossible to assume too decided a position upon the last observation. He would ask what was meant by "dipsomaniac." There was no more misused term. Probably if he asked Dr. Yellowlees to give an absolute definition of that word he (Dr. Stewart) would not be satisfied with it. The majority of the cases called "dipsomaniac" were not so at all. The term was very loosely used by the general public, and they, as practical physicians, should set themselves most decidedly against looseness of application of a term. What was "mania?" They generally accepted, as a fair definition of insanity, that it was a disease of the brain which involved the mind. Now, was the ordinary dipsomaniac one who had got a disease of the brain? And, until they were prepared to say that the majority of the patients called "dipsomaniacs" had a physical disease of that portion of the body which was called the brain, it was extremely unscientific to speak of "dipsomania." Nine-tenths of so-called "dipsomaniacs" were not so at all, and no psychologist of scientific repute would class them as such. A dipsomaniac, in the ordinary sense of the term, was only a person who was in a chronic state of drink. Was that a brain-disease? Was a constant desire of a man to give way to his carnal passions a disease of the brain? Were all the vices he could name diseases? He maintained that there was not one case in a thousand of so-called "dipsomaniacs" in which it was at all necessary, or even good practice, to administer stimulants in any form whatsoever. It had been remarked that they were too careful to regard what the outside world said, and what the Commissioners said. He endorsed this in both ways. A typical case had been brought under his notice the other day, in which an individual, who was decidedly of unsound mind, was brought before a physician who had a great fear of the Commissioners. He (Dr. Stewart) had no such

fear. His first duty was to look upon the case individually, and, having come to a conclusion upon it, he thought the other gentleman might consider it separately, and apart from his fear of the Commissioners. "No," he said, "I will not. The Commissioners may upset the case in a few days." He thought they were bound to do their duty in spite of what the Commissioners might say, and he commended Mr. Mould for the way in which he acted upon his opinions. He was quite sure that an intermediate home would do good; but there was a great practical difficulty in the way, and that was the bugbear of the Commissioners.

Mr. BONVILLE FOX said that as to the place of rest which had been proposed, he should like to ask what would be the legal status of the individuals treated therein? by whom would they be transferable thereto and therefrom? by whose authority and at whose discretion would they be kept there? who would determine whether they should be kept there or sent on? and, while there, at whose risk were they there? He was bound to say he had that afternoon heard one or two things which had rather astonished him and opened his eyes. He heartily endorsed what had fallen from Mr. Hayes Newington, that the fear of the law was the great protection of the freedom of action of the individual. Anything that would relieve the proprietors of private asylums from their responsibility and onus would be welcomed by them as freeing them from the unpleasant position in which they were often placed; and if patients were consigned to them by such an order as that of the Sheriff in Scotland their position would be a very different one from what it was. He would point out especially that, as far as the freedom of the patient was concerned, he would be precluded for ever from bringing any action against a person who had signed that order, when once it had been endorsed by a sheriff or magistrate. With reference to what Mr. Mould had said, he might say that about a month ago a patient was brought to his asylum at ten o'clock at night. The order had not been signed, but the certificates had been. It would have been contrary to their idea of anything legal to have received the patient, so the only thing they did was to send up to the nearest magistrate, who, after a good deal of compunction, signed the necessary order. He found now that they might have received that patient.

Mr. MOULD explained that what he had said referred only to boarders in hospitals.

Mr. BONVILLE FOX said he did not quite understand what Mr. Mould had said about the dipsomaniac lady.

Mr. MOULD said that he was only stating what was the law upon the subject as to voluntary boarders. That lady was received under her own hand. He enforced his bond, saying, "No; you agreed to stay with me." The Commissioners saw her, and they said, "Give her another chance." He did so, but she came back again. The Commissioners had sent round a circular saying that all hospitals could receive voluntary patients. No sanction had to be got whatever.

Mr. BONVILLE FOX asked whether they were kept when they wanted to go away.

Mr. MOULD replied that they could be kept for a definite period.

Dr. NICHOLS, of New York—Mr. President and Gentlemen: I heartily thank you for the cordial manner in which you have received my introduction to you as a member of the American Association of Superintendents. Though well aware that an introduction to your body by such a distinguished and esteemed member of it as Dr. D. Hack Tuke affords ample warrant for your cordiality, I regret that I forgot to bring with me this morning from my distant hotel in this great city a certificate accrediting me to this Association as a delegate from the like Association on the other side of the water. I shall, however, embrace an opportunity to hand it to your Secretary as a sort of official evidence that I am the man that, upon Dr. Tuke's authority, you have kindly taken me to be. That

document authorizes me to offer you the cordial greetings of the body I represent on this occasion. If I am correct in my recollection, our Association takes precedence of yours in age, but as a people we do not forget our national origin, which we consider exceedingly respectable, and still, as I trust we always shall, notwithstanding occasional differences in past times, have a filial regard for the mother country, and a family pride in the grandeur of its institutions and the happiness of its people. The able and practical Address of your President, and the discussion that has followed it, have deeply interested me, partly because of the views expressed, and partly because I find that most of the subjects brought to your attention by the Address are the very same that are now engaging the attention of practical alienists in America. It is true that two or three of them may be said to be *res adjudicatæ* with us. For example, a large proportion of our patients come to us both in an anæmic and neuræsthenic condition, and we are quite agreed that they generally need a generous diet; and, with few exceptions, I think they get it. The variety of food they get is considerable, the quality is generally at least fair, and the quantity is practically unlimited. We everywhere experience the difficulty of cooking and serving the food in the best manner, for large numbers, that has been before referred to in this discussion; and while the cooking and table service in our institutions have been greatly improved in the last twenty-five years and is in the majority of them now fairly well done, without doubt it is in many of them susceptible of much improvement. We give our patients milk and fruits freely. In many institutions malt liquors are more or less used, but I think they are generally prescribed as a tonic rather than used as a beverage or article of diet. Again, so far as I am aware, there is not any sentiment among our practical men in favour of the family care of the dependent insane. We have not suitable families suitably situated, nor does it seem practicable for us to make provision for the requisite supervision. But with respect to what is known as the *cottage* treatment of the insane, alluded to in the Address, I may say that there is with us a growing tendency to disintegrate our patients, most of the latest asylum edifices having been built in separate sections or blocks connected by corridors. In the State of Illinois a public institution has been built, and organized distinctly on the cottage or quite-separate-buildings plan, but the desirability of public provision for the insane upon this plan may be said to be with us an open question. I think we do pretty generally favour detached buildings for the chronic and other special classes, but connection with an ordinary asylum or hospital edifice, suitably furnished and fitted up, for the treatment of the recent and active cases. The Government Hospital for the Insane at Washington, and the Willard Asylum for the Chronic Insane in the State of New York, are examples of such an arrangement of buildings. We have, as you know, in America nearly forty States, each of which is independent of all the others, and of the general government, in the management of its interior concerns, among which is the provision it makes for the care of its dependent classes, including its insane. The natural consequence of this governmental arrangement is that the laws of the different States relating to certification for the purposes of treatment in their institutions vary very greatly. In some States they are much too lax, allowing a patient to be sent to an asylum upon the simple certificate of one physician; in others they are too rigid, not to say barbarous, requiring a verdict of insanity by a public jury, as if the patient were under a criminal charge, before he can be placed under proper treatment. In some States, as in New York, legislation has been enlightened and prudent, and their laws relating to certification are pretty much all that can be desired, being sufficiently rigid to amply protect the personal liberty of the citizen and satisfy popular sensibility upon this subject, while they allow reasonable promptitude in getting patients under treatment. It may be said that, whatever views may be entertained by individuals on our side respecting the restraint and treatment of the insane upon the responsibility of their friends and the medical men having the

care of them, it is not probable that any one of the American States would tolerate such a practice. I know of no law in America that stands in the way of the admission to our institutions of strictly voluntary patients, but our difficulty in such cases is that they will rarely remain under treatment long enough to receive lasting benefit. It has never come to my knowledge that a physician has lost his attendance upon the family by certifying to the insanity of a member of it, precedent to his treatment in an institution or asylum. Except in the case of the poor, supported on the public charge, certificates are usually given at the request, or at least with the concurrence, of the nearest relative or guardian of the patient. While there has not been any material change in our views respecting the nature of insanity, I believe there has been, in a practical way, a more general recognition that it has essentially a physical pathology than was formerly the case, and that the general aim among us is to place the patient in a sound physiological state, and at the same time to give the cerebral disorder and the mental derangement such special treatment as appears to be indicated in each case. We probably resort to medical treatment as often, perhaps oftener, than we formerly did, but I am glad to believe that it is much more delicate and discriminating, and less gross and routine than it formerly was. The views and practice of our superintendents are not altogether uniform, as, from the Address and discussion, they do not appear to be here; but the tendency is, I believe, towards what I have stated. For myself, after a pretty long experience, I am an earnest believer in the value of medicines in the treatment of insanity, but hold that, in this as in all other diseases, they should be prescribed with careful reference to an important end that the physician believes can be attained by their administration, or in conjunction with it, but which can not be as well or certainly attained without their use. It is clear to me that opium is curative in a limited number of cases of mania, and that it may be administered with advantage in some cases of melancholia; also that opium, the bromides, chloroform, hyoscyamus, if discriminatingly used, are so advantageous in allaying excitement and procuring sleep that it at times becomes the duty of the physician to prescribe them, but that their long-continued use in individual cases should generally be avoided. Warm, graduated baths, with the application of cold water—sometimes of ice-water—to the head when the latter is hot, taking great care not to frighten or distress the patient, and following the bath by rubbing the whole surface with alcohol or whiskey, as a swelling is rubbed with liniment, will often procure sleep more satisfactorily than any drug administered internally, while it allays the fever and saves the strength of a feeble patient. Our climate is malarial, and we have occasion to use a good deal of quinine, both as an anti-periodic and tonic. We also use the mineral and special tonics freely. Counter-irritation to the shaven head has gone almost altogether out of practice in American institutions for the insane, from the same feeling that appears to have influenced British practice in this respect, viz., that if it is of doubtful advantage, as we think it is, then it is scarcely justifiable. We have felt that, when such treatment appeared to be indicated, its ends can be substantially as well attained by cups and blisters over the nape, temples, and behind the ears, as by applications to the shaven head. I forbear to further traverse the Address, wishing to confine my remarks strictly to a few subjects of common interest on both sides of the water, and thank you for the patience with which you have listened to what I have said.

Dr. CAMPBELL said that allusions had been made to the boarding-out system. That was a matter he should like to hear about. There was at one time a very great deal written about this in the official records of the Scotch Commissioners, but during the last seven years he had noticed that there had been a gradual diminution in the numbers boarded out, and, as it was a matter involving many points for consideration, he might, perhaps, be allowed to throw out the suggestion that it would form a most admirable topic for a paper from the other side of the border.

The PRESIDENT, in reply, said that the discussion on the Address had been so prolific that he could not but feel thoroughly satisfied in having thrown his net as widely as he had done to catch subjects which had excited interest. As regards "treatment," he would only say that he thought Dr. Bucknill misunderstood him to a certain extent. His observations on that head might be summed up by saying that he considered it necessary to be a good physician to be a successful alienist. He spoke of the use of narcotics as a means of restraint as one of the things of the past; but he left it quite an open question whether the brain could not be satisfactorily influenced by narcotics, as some in the profession held that it could be, although he, for one, had not been successful with them. He did not say narcotics were not of use, or might not be of use, but at present his own reliance as to treatment was on bodily health and external applications to the head, which he had found very successful in certain cases of stupor, and even in some cases of hallucination in which there was reason to suspect a localized lesion of the brain. With regard to the treatment of dipsomania, he could say only that he had been much more successful in the cases he had treated by training the patient in habits of self-control than in those cases in which he had tried to get the patient to abstain altogether. He could quote one case of a man whose grandfather and father were dipsomaniacs. The patient himself became insane from drink at the age of 49. He was under restraint for some years, and recovered. After leaving the asylum he lived for ten years, not as a total abstainer, but as a moderate user of alcohol at his meals. With respect to the general question of dietary, he was pleased to find that his remarks were approved of. He trusted that Dr. Campbell's suggestion as to a forthcoming paper on "boarding-out" would bear fruit.

A paper by Dr. Newth, "On the Value of Electricity in the Treatment of Insanity," was taken as read.

A vote of thanks was unanimously accorded to the Royal College of Physicians for the use of the room, and the proceedings then terminated.

The members of the Association afterwards dined together at "The Ship," at Greenwich.

ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION AT BELFAST, JULY 29TH TO AUG. 1ST, 1884.

SECTION II.—PSYCHOLOGY.

OFFICERS:—

PRESIDENT	DR. SAVAGE, Bethlem Royal Hospital, London.
VICE-PRESIDENTS	DR. HACK TUKE, London, DR. ASHE, Dundrum.
SECRETARIES	DR. MERRICK, Belfast. DR. REES PHILIPPS, St. Ann's Heath, Chertsey.

There was a fair attendance of members, nearly 50 taking part in the meetings.

PROCEEDINGS:—

30th July.—The PRESIDENT delivered an able Address on "The Pathology of Insanity."*

The discussion was opened by Dr. DEAS, who remarked with what pleasure he had listened to Dr. Savage's able and suggestive Address, and said it was particularly interesting to find that he had taken up the subject of the relations

* Published *in extenso* in the "Brit. Med. Journ." Aug. 2nd, 1884, p. 239.

between bodily and nervous diseases in a way which might be considered cognate, or complementary, to those so ably brought forward by Dr. Ord in his Address on medicine. The latter had discussed the causation of certain bodily diseases through the influence of the nervous system; while Dr. Savage had shown how profoundly the nervous system and mental conditions may be modified by the existence of certain bodily states or disorders. He pointed out, in reference to an etiological classification of insanity, that though it was, as Dr. Savage said, imperfect, still it was very important to view insanity clinically in connection with co-existing bodily diseases. He alluded also to the interest of those cases in which the occurrence of acute bodily disease appears to modify profoundly the mental symptoms, even in long-standing cases of chronic insanity.

Dr. STEWART remarked—We cannot, as practical physicians, be too careful in our sanction of the use of medical terms. The term "insanity" does not commit us to a theory, and, therefore, is not objectionable if used in its broadest sense—that of non-sanity. But we find most people applying it in a restricted sense, implying that they believe there exists a pathological lesion of a portion of the brain. There may be no pathological change of cerebral tissue, and yet there may be mental disorder—not such as one could associate even in theory with any alteration of the kind. Functional disorder, as the President has wisely emphasised, is a recognizable abnormal condition, and ought to be studied by us as practical physicians.

Dr. TUKE mentioned two cases of suicide, followed by complete blank in one case and partial blank in the other. He referred to the distinction between functional and structural disease, and was glad that Dr. Savage had brought this out so prominently. It seemed to him most important to recognize that mere change of position of the minute constituents of the brain is sufficient to cause insanity without any pathological change being discoverable after death, or, indeed, being present at all. Then there were cases of what he might call physiological insanity, in which there is a constitutional disproportion of portions of the brain, so that without there being a change of character due to disease, there might be an abnormal state in which the individual was not responsible for his actions. He referred also to the cure of insanity by an appeal to reason, and mentioned the case of a woman who after being silent for years, and regarded as incurable, suddenly recovered on considering the improbability of her delusion, which was that she had been all this time in hell.

Dr. CONOLLY NORMAN remarked—It is a little point, but it must be said that the absence of good cases in asylum case-books is very often due, not to want of intelligent interest on the part of medical officers, but really to want of time. In general hospitals the staff of physicians, assistant physicians, house physicians, and clinical clerks—all more or less skilled observers—form quite a large percentage in proportion to the patients, but in Ireland it often happens that one man alone has to do all the medical, administrative, and social duties belonging to the management of a large asylum. In England, of course, things are better, and in America, as one is glad to notice from the reports, better still; but even in the best-manned asylum, the staff is insufficient to give to every case that minute scientific care that is so desirable for the extension of our knowledge by minute observation.

Dr. WOODS—The great difficulty, rendering it almost impossible to keep a case-book of any value in the Irish asylums, is due to the very imperfect entry obtained with the patients; the certificates are meagerly and inaccurately filled, and no one comes to the asylum with the patients save the police, who are total strangers. The second cause is the want of sufficient medical staff. I believe it is absolutely necessary that an assistant should be appointed to every asylum, and a representation on this subject, either from the Psychological or British Medical Association, might do much good.

Dr. ISAAC ASHE said he thought that Dr. Savage's remarks on monotony as a factor in the production of insanity were of much importance. He had lately

had a case that pointed to the view that this monotony might be that of physical exertion on mechanical occupation as well as mental monotony. It was that of a carpenter who had seemed to make a very good recovery until he was caused to resume his usual occupation in the asylum, when immediately there was another outburst of insanity of a severe and prolonged character. As regards extravagance of expenditure, he almost thought that in acute mania it might be regarded as the whole thing, and that excessive change in the cerebral nerve-cells might be due rather to change in the composition of the blood circulating, or in the rate of its circulation through the organ, rather than to original change of a nervous character. He thought that in general paralysis there was ground for believing that the cerebral changes were an expansion in that one direction of changes affecting the whole system, and characterized by the removal of the basic salts, the calcic salts being abstracted from the osseous system, the potassic from the muscular, and the sodic from the nervous, the result being fatty degeneration in each case, the sclerotic degeneration of the cord found after death being possibly of secondary character.

Later, on July 30th, papers were read by Dr. Norman Kerr, "On Inebriety, a Disease Allied to Insanity," and by Dr. D. Hack Tuke, "On Alcoholic Beverages in British Asylums."

The papers on Thursday, July 31st, were: "The Care of Suicidal Patients," by Dr. Yellowlees; "Insanity Complicated with Asthma," by Mr. Conolly Norman.

On Friday, August 1st: "On Moral Insanity," by Dr. D. Hack Tuke; "Suggestions on the Treatment of Epileptic Dementia," by Dr. Harkin.

Dr. S. Rees Philipps has been so kind as to supply notes of the discussions on the above papers, but it seems useless to publish them until the papers themselves have appeared.

At the conclusion of the business of the Section, a very hearty and unanimous vote of thanks to Dr. Savage for his valuable services as President of the Section was proposed by Dr. YELLOWLEES, seconded by Dr. AGAR, and carried by acclamation.

ANNIVERSARY MEETING OF "AFTER-CARE" ASSOCIATION, 1884.

The "After-Care" Association—whose meetings have been frequently recorded by the "Journal of Mental Science"—held its anniversary on 3rd July for 1884, at 83, Lancaster Gate, by kind permission of Lord and Lady Brabazon. The Earl of Shaftesbury, President of the Association, occupied the chair, for the fourth year in succession.

The minutes of the last meeting, and a review of the Society's history during the five years of its existence, were read by the Rev. H. Hawkins, Hon. Sec.

Dr. T. C. Shaw (the Hon. Treasurer) having made a statement about the funds in hand, moved the following resolution:—"It is desirable to establish a Home for the temporary reception of females who have left the county asylums cured. Such Home to be under the charge of a resident matron, and subject to the control of a Committee of 12 ladies, appointed by the General Committee, and to include the Hon. Sec. and Treasurer."

Seconded by Reverend J. W. Horsley.

This resolution was, however, withdrawn, and a proposition by Dr. D. Hack Tuke, seconded by Dr. James Adam, adopted—"To refer the matter of a Home for the Committee to report upon at a general meeting called for the purpose." This meeting, it was agreed, should be held on the first Thursday in November.

Among other speakers were Dr. Bucknill—whose judgment was not in favour of a special Home—Rev. F. H. A. Hawkins, and Mrs. Ellis Cameron, Hon.

Secretary of the Ladies' Committee, who has evinced much interest in the Association, and who raised an earnest plea on behalf of the establishment of a Home.

The thanks of the meeting—among whom were Miss Twining, Miss Agnes Cotton, Miss Fremantle, Lady Cotton, and others—were conveyed to Lord and Lady Brabazon and to the Earl of Shaftesbury, who remarked that homes for mental convalescents appeared to him to be a necessity; and, in acknowledging the thanks of the meeting, said that he had been for more than fifty years (as Commissioner in Lunacy) connected with kindred work. Dr. Savage having invited the After-Care Association to hold their anniversary for 1885 at Bethlem Hospital, the meeting separated.

THE REPATRIATION OF FOREIGN LUNATICS.

Copies of Dr. Mercier's resolution on the above subject, brought forward and carried at the May meeting of the Medico-Psychological Association, having been sent by the Hon. Secretary to the Commissioners in Lunacy and other authorities, the following replies (abridged) have been received:—

Office of Commissioners in Lunacy,
19, Whitehall Place, S.W.,
July 9th, 1884.

SIR,—I am requested by Lord Shaftesbury to acknowledge the receipt of your letter of the 3rd instant, with reference to a resolution of the Medico-Psychological Association, relating to lunatics in asylums of nationality foreign to their own. Your letter was communicated to the last Board, and the Commissioners in Lunacy directed me to say that they presume that a copy of the resolution has been sent to the Home Office. They believe, however, that the conclusion arrived at by the Government some years since is unaltered, viz., that it would be inexpedient to institute any international scheme of "repatriation" of lunatics.

I am, Sir,
Your obedient Servant,
CHARLES SP. PERCEVAL,
Secretary.

H. Rayner, Esq., M.D.

Foreign Office,
July 29, 1884.

SIR,—I am directed by Earl Granville to inform you that your letter of the 3rd instant, enclosing a resolution passed by the Medico-Psychological Association, respecting the repatriation of pauper lunatics, was referred to the Lords Commissioners of the Treasury, who state that they would not be averse to a reciprocal arrangement of the kind with foreign Governments.

From past experience, however, their Lordships anticipate that there would be a great difficulty in making any such general arrangement, and they are of opinion that it would probably be impracticable to confine the arrangement to lunatics, and not to extend it to all distressed foreigners.

I am, Sir,
Your most obedient humble servant,
J. PAUNCEFOTE.

H. Rayner, Esq., M.D.,
Middlesex Lunatic Asylum, Hanwell.

Local Government Board,
Whitehall, S.W.,
11th July, 1884.

SIR,—I am directed by the Local Government Board to acknowledge the receipt of your letter of the 3rd instant, transmitting a copy of a resolution passed by the Medico-Psychological Association, that it is desirable that arrangements should be made for the transference of persons confined in lunatic asylums of nationality foreign to their own to the country to which they belong.

I am directed to inquire whether the Association are in a position to furnish the Board with any facts as to the number of English lunatics in asylums in foreign countries.

I am, Sir,
Your obedient servant,
C. N. DALTON,
Assistant Secretary.

To H. Rayner, Esq., M.D.,
Middlesex Lunatic Asylum, Hanwell, W.

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Appointments.

Batten, George B., M.B,, C.M.Edin., appointed Assistant Medical Officer, Fife and Kinross District Asylum.

Beatley, W. Crump, M.D. Durh., M.R.C.S., appointed Senior Assistant Medical Officer, Somerset and Bath Lunatic Asylum, Wells.

Duffus, George, M.B., C.M. Aberd., appointed Assistant Medical Officer to the Cheshire County Lunatic Asylum, Macclesfield.

Greenlees, J. Duncan, M.B., C.M. Edin., appointed Junior Assistant Medical Officer, Cumberland and Westmorland Asylum, Garlands, Carlisle.

Lofthouse, Arthur, M.R.C.S. and L.S.A., appointed Assistant Medical Officer to the County Lunatic Asylum, Snenton, Nottingham.

Robertson, Alex., M.D., of the City Parochial Asylum, Glasgow, has been elected Physician to the Glasgow Royal Infirmary.

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PART 1.—ORIGINAL ARTICLES.

Practical Remarks on the Use of Electricity in Mental Disease.

By A. de Watteville, M.A., M.D., B.Sc., Physician to the Electro-therapeutical Department, St. Mary's Hospital, London.

"Il n'y a point de parité entre la responsabilité d'un médecin et son pouvoir ; l'une est grande et l'autre petit, et c'est justement à cause des limites où ce pouvoir est resserré que, bien qu'il soit facile d' en laisser perdre une parcelle, la moindre parcelle perdue cause une poignante anxiété."

Littré.

The application of electricity to the treatment of insanity is, I am happy to observe, beginning to occupy the attention of alienists in this country. From the perusal of some papers recently published,* and letters of inquiry received on the subject, I gather that many of those anxious to test the efficacy of the current in certain forms of mental disturbance are somewhat in the dark as to the instrument required for, and the manipulations required in, the rational application of the agent. I propose here to give a short outline of the principles which ought to guide the physician, and a few hints as to the best way of putting the theory into practice.

First, let us consider the question of instruments. In treating insanity our main object is to improve the circulation and nutrition of the brain, and this we may endeavour to effect either by the direct permeation of that organ by currents, or through a reflex influence exerted by certain excitations of the peripheral nerves. In order to secure an effectual permeation

* See Dr. Newth's paper in the last number of this Journal.—[Eds.]

of deep organs we must have resort to the *Galvanic* (or constant) current.

The first point to be taken into account is the average strength of current required, in other words the number of cells needed. Experience has shown that six to fifteen cells of sufficient electromotive force are the number usually required. But it will be convenient to have thirty at hand. Then, again, the applications are to be made to the head; this necessitates a contrivance for regulating the strength of the current with the utmost precision and smoothness. Thirdly, it is convenient to be able to reverse the polarity of the electrodes without removing them from the body or battery. A commutator has to be provided. Finally, the strength of the current used has to be noted; such a measurement is effected by means of a galvanometer.—The thirty cells must be small if portability is a necessary condition to be fulfilled by the battery. The size of the cells has no perceptible influence on the strength of the current obtainable from them through such a high resistance as that of a portion of the human body; but it is to be remembered that small cells are less durable, more liable to accidental fluctuations than big ones. Whenever, therefore, patients can be made to go to the battery the latter had better be made up of good-sized Leclanchés, which, if well made and put together, will work for several years without recharging or any further trouble.—There are two kinds of portable cells to be recommended—first, the small Leclanchés (those I have obtained of Mr. Schoth, of 232, Euston Road, have given me most satisfaction); second, the sulphate of mercury elements (made by Mr. Thistleton, 1, Old Quebec Street, W.). The advantage of the first is that they require no attention until exhausted—an event which depends upon the care taken in carrying the battery about, and the amount of work done with it. The average duration of a small Leclanché is eighteen months, when (and this is the drawback of their kind) it must be returned to the maker for recharge. The advantages of the new sulphate of mercury cell are that the owner of the battery may keep it going himself; the drawbacks being that it requires some amount of nursing—far less, however, than the clumsy, antiquated Stöhrer's acid element, which is further exposed to the dangers of being easily spilt.

A *collector* is a contrivance by which any given number of cells may be thrown into action; it affords us the means of regulating the strength of the current. The collector is usually

made in the shape of a dial. A circle of metallic studs, numbered and connected with the successive cells in the battery, surrounds a central pivot on which revolves a switch, the peripheral extremity of which comes successively in contact with each of the series of studs. It is important, as I have already observed, for cephalic electrisation that the current should be gradually increased and diminished, for otherwise, in the case of nervous patients especially, the vertigo and phosphenes produced by the sudden shocks accompanying sudden changes in the current-strengths, are a source, if not of positive danger, at least of more or less serious discomfort. It is therefore advisable to have as many studs in the dial as there are cells in the battery, so as to proceed by increments of one cell only in bringing the current up to its required strength, and *vice versâ* to diminish it by one cell at a time in reducing its strength before the removal of the electrodes from the body.

Of the *Commutator* and *Galvanometer* I shall say little here. The former is a simple instrument which will be found attached to every complete battery. With reference to the latter I have strongly advocated its use for many years, with a modification (graduation in milliamperes, or units of absolute current strength) which makes of it a truly *measuring* instrument. My arguments will be found elsewhere* by the reader interested in the rational application of electricity to medicine; I need only add here that since the late International Congress of Electricians in Paris the milliampere has generally been adopted by electro-therapeutists, and graduated galvanometers may be obtained from most Continental makers, and in this country from Thistleton, whose name has already been mentioned in the course of these remarks.

Of the electrodes required two should be made in the shape of well padded plates of flexible metal, 2½ by 5 inches in size, which adapt themselves accurately to the shape of the part of the body to which the current has to be applied. A third should consist of a carbon disk, 3 inches in diameter, also padded, fixed to the extremity of a strong wooden handle. The padding consists of a good thickness of wash-leather, with or without a layer of sponge. When the patient's skin is a bad conductor—a fact shown by the galvanometer—the electrodes are to be well moistened with warm salt-and-water; otherwise plain water is sufficient.—With reference to

* "A Practical Introduction to Medical Electricity," 2nd Edition, page 28.

faradic (or induction) apparatus, I need not describe here the various models now in use. Any well-made instrument of sufficient size and power will fulfil the special requirements of the alienist.* The battery should consist of a couple of Leclanché, or chloride of silver, cells.† Sulphate of mercury cells are convenient only when the apparatus has to be used at intervals, as they require a small fresh charging on each occasion. The secondary coil should be made of wire sufficiently long and fine to give a good spark when its current is applied to the skin with a metallic conductor; the primary coil should yield an extra-current sufficiently powerful to produce good muscular contractions when applied through the large electrodes already described. A wire brush is required for the faradisation of the skin.—I now pass to the *modus operandi.* It would be impossible within the limits of this article to describe in detail the operations required for the successful application of the current. I have done this in the manual already referred to, and the reader anxious to familiarise himself with them will require not only to read the rules, but to practise them faithfully, remembering that it is not "Electricity" which cures, but "Electrisation"—a process requiring far more technical skill than the uninitiated generally believe. I shall content myself here with giving some general directions based upon the rationale of electrisation in the treatment of mental disturbances. The chief indications which govern our applications here obviously are:

1. To promote the equilibrium of the cerebral innervation by acting directly on the nutrition of those centres which are deficient functionally or organically, through molecular, vasomotor, or other influences. Experience shows we can do this, in some cases, by direct galvanisation of the head and neck.

2. To rouse up the peripheral and spinal innervation, and to indirectly restore their necessary equilibrium by supplying a deficiency in the afferent influxes upon which it partly depends. Here galvanisation of the spine, and general faradisation (with the moist electrode or wire brush according to the requirements of the case) will be of service.

3. When the cerebral troubles are connected with some

* With reference to the cost, I may say that eight pounds for a *complete* galvanic battery of forty cells, and two for a good induction apparatus ought to be sufficient. For details the reader is referred to the catalogues of the makers already named.

† Schoth's new pattern. Gaiffe's are not to be recommended.

disturbance of the abdominal or pelvic viscera (visceral paræsthesiæ, torpidity, and the like), to correct or mitigate the latter by the application of either current, or better still, by the method I have described under the name of galvano-faradisation.* The value of electricity in visceral neuroses is very great, though hitherto unrecognised.

4. To relieve certain symptoms as they arise according to the rules laid down in the usual treatises. It must not be forgotten, for instance, that general faradisation is a good tonic and excitant of general nutrition. In some cases, again, appropriate electrisation acts as a promoter of sleep.

Such are, stated in general terms, the principles which ought to guide the physician in the electro-therapeutics of mental disorders.† It will have been observed that in this article I have not made any allusion to the direction of the currents through the body, or what comes to much the same thing, to the relative position of the anode and kathode (positive and negative pole) on the body. My reason for departing from these time-honoured traditions is this. All the rules given by the adherents of the "directional" and the "polar" school of electro-therapeutists are based on physical errors or on aprioristic considerations; experience has not confirmed the former; advance of knowledge has ruined the basis of the latter. If there ever appears to be a therapeutical difference between the action of the two poles, it has to be established and defined empirically, for it rests on some idiosyncrasy of the particular patient under observation. The doctrine of electrotonus ‡ has no place in treatment. We may state as a general rule that the best results are obtained by using *both poles successively* to each point of application, remembering only that the kathode has a greater local action, both chemical and stimulant.—I refrain from

* "A Practical Introduction to Medical Electricity," pp. 161 and 190.

† The psychical effects of electrisation should be remembered, and may, in the hands of a judicious experimenter, be turned to good use in appropriate cases.

‡ The conditions under which electro-physiological phenomena are observed in the laboratory render them inapplicable to the explanation of phenomena observed in the living human body. Here what is above all required is a thorough mastery of the questions connected with the resistance of the tissues, and the diffusion of the current in them. Electro-physics, not electro-physiology, must for the time being form the basis of electro-therapeutics; much remains to be done before it can be otherwise. (Cf. *loc. cit.*, chapter ii, and the paper by Waller and myself on the effects of the galvanic current on the motor nerves of man, in the "Philosophical Transactions of the Royal Society" for 1882.)

committing myself to any positive statements concerning the forms of mental derangement in which electrisation is most likely to prove successful. It has not yet been tried on a sufficiently wide scale to furnish us with the data necessary for such generalisations. States of depressed nerve-action seem, however, to have hitherto yielded most successes. Certain sensory paræsthesiæ hallucinations have likewise been stated to be amenable to appropriate galvanisation. Symptoms of excitement indicate that the utmost prudence is required in, if they do not forbid, the application of galvanic treatment. But it is obviously among those who are still hovering on "the borderlands of insanity," rather than among those who have for years passed the limits and have become confirmed inmates of our asylums, that the most fruitful field for electro-therapeutic activity will be found. An interesting field, too, the very paucity of implements for whose cultivation, should make the physician loth of allowing a single one, however humble, to escape him; a field the fruits of which—human reasons reclaimed—even if scanty in number are sufficiently valuable to stimulate us to the utmost efforts. It was with this thought in my mind that I ventured to offer these remarks to the readers of the Journal; for, as Littré so truly remarks, if the responsibility of the physician is great, his power is limited; whilst the narrower these limits, the more sacred is his duty to explore every inch of ground within the fatal precinct.

Clinical Observations on the Blood of the Insane. By S. RUTHERFORD MACPHAIL, M.D.Edin., Assist. Med. Supt., Garlands Asylum, Carlisle; being the Essay to which the prize of £10 10s., together with the bronze medal of the Association, was awarded in 1884.

(Concluded from p. 389.)

III.

While the condition of the blood vessels in General Paralysis has been a subject of discussion by many observers, and the state of the pulse, including sphygmographic tracings, has engaged the attention of Thompson* and others, I have been

* West Riding Reports, Vol. i.

unable, in the literature to which I have had access, to find reference to any observations on the state of the blood in this disease.

With the object of ascertaining the condition of the blood in General Paralysis, I selected five typical examples of male general paralytics at three different stages of the disease, and examined their blood. The three periods selected were (1) on admission, (2) in the demented and lethargic condition, and (3) in the bedridden and completely paralysed stage. The results are given in tabular form (C).

C. Tables showing the Quality of the Blood in Male General Paralytics at three different stages of the disease.

I. Five General Paralytics on Admission.

No.	Age.	Probable Duration of Disease.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red Corpuscles.
1	40	6 mos.	68	89·2	1 to 280
2	36	12 mos.	62	88·1	1 to 350
3	32	9 mos.	66	88·4	1 to 260
4	45	3 mos.	70	90·3	1 to 310
5	48	4 mos.	65	87·6	1 to 340
Averages	40·2	6·8 mos.	66·2	88·7	1 to 308

II. Five General Paralytics over Six Months after Admission.

No.	Age.	Period of Residence.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red Corpuscles.
1	32	Over 3 years	75	89·9	1 to 250
2	54	,, 9 mos.	65	87·6	1 to 130
3	67	,, 1 year	72	85·3	1 to 180
4	52	,, 1 year	70	84·4	1 to 180
5	38	,, 9 mos.	68	85·3	1 to 140
Averages	48·6	Over 15 mos.	70	86·5	1 to 176

III. Five General Paralytics in Last Stage, Bedridden and Paralysed.

No.	Age.	Period of Residence.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red Corpuscles.
1	49	Over 18 mos.	58	77·6	1 to 140
2	51	„ 16 mos.	64	81·1	1 to 140
3	42	„ 8 mos.	55	68·9	1 to 110
4	50	„ 6 mos.	66	82·5	1 to 120
5	45	„ 9 mos.	60	80·4	1 to 110
Averages	47·4	Over 11 mos.	60·6	78·1	1 to 124

From an analysis of the first of these tables we find that the average percentage of hæmoglobin is 30 per cent. below the normal standard, and that in individual cases, with one exception (No. 5), the longer the probable duration of the disease the lower is the percentage. The percentage of hæmacytes is also diminished, though to a less extent; and as in the case of the hæmoglobin, with one exception (No. 5), this decrease is coincident with the duration of the disease. The proportion of white to red corpuscles is increased, but this increase does not appear to vary in the same ratio as the hæmoglobin and hæmacytes with the duration of the disease.

The second table is composed of patients in the quiescent stage of the disease, who have resided in the asylum for an average of over fifteen months. The most noteworthy features in this series are an increase in the percentage of hæmoglobin and in the proportion of white to red corpuscles, and a decrease in the percentage of hæmacytes. An interesting point in this table is that, contrary to what one might expect from the preceding table, the percentage of hæmoglobin is higher, and the proportion of white to red corpuscles is lower in relation to the length of residence of the individual patients. There is also a similar increase in the relative proportion of hæmacytes, but there are two exceptions (Nos. 2 and 4) to this. The average percentage of hæmoglobin is higher, and the average percentage of hæmacytes is lower, than in the case of ordinary demented patients at the same age.

The third group is selected from advanced cases of paresis. In two instances (Nos. 1 and 3) the patients died on the day succeeding the observations, and in both these cases the percentages of hæmoglobin and of hæmacytes are very low. In

all the five cases the relative proportions of hæmoglobin and hæmacytes are much below the percentages in either of the preceding groups. The proportion of white to red corpuscles is much increased.

In the last group the blood in each instance was dark, venous in character, and drawn with difficulty from the finger. In the hæmacytometric observations the individual corpuscles were so irregular in outline and deformed that it was deemed advisable to examine the blood on a slide in the ordinary way. The white corpuscles were much increased; there was little tendency of the red corpuscles to form rouleaux; in all the cases the individual corpuscles were crenated; in two they were irregular in outline, and in one observation many of the corpuscles were tailed or had processes. In two cases in the second group the blood contained a large number of corpuscles of small size; in two the larger proportion of the corpuscles were crenated; and in one their outlines were irregular. In both the first and second groups the blood was darker than normal. Small granule cells were observed in four instances in the first series, twice in the second, and not at all in the last series.

These observations may be summarised thus :—

(1) The percentage of hæmoglobin is low on admission, it improves in the quiescent stage of the disease, and falls again in the paralytic stage.

(2) The red corpuscles deteriorate both in quality and quantity coincident with the progress of the disease.

(3) Small granule cells are not present in the blood during the last stage.

(4) The relative proportion of white to red corpuscles is increased, and this increase is coincident with the progress of the disease.

Defective nutrition of the body, including anæmia, has long been recognised as a predisposing cause of epilepsy. In idiopathic epilepsy no constant anatomical lesion has been discovered, and it may therefore be inferred that the lesion is a molecular one. According to Nothnagel's theory, continued excitation of the vaso-motor centre is the necessary pathological condition of the epileptic paroxysm. In other words, he believes that irritation of the vaso-motor centre causes contraction of all the arteries of the body, including those of the brain; and that the anæmia caused by the contraction of the vessels of the brain is the active factor in producing epilepsy. He has not, however, so far as I am aware, supplemented this theory by recording a series of observations on the blood of epileptics.

In this asylum all the male epileptic patients, with three exceptions, have, as part of their routine treatment, continuous doses of Bromide of Potassium (grs. xxx thrice daily), and many of the patients have had this treatment with occasional intermission for a number of years.

With the object of determining whether the blood is deteriorated in patients suffering from epilepsy, as Nothnagel's theory suggests, I have examined the blood in a series of epileptics. As all the patients were being treated with continuous doses of Bromide of Potassium, I have taken as the bases of my observations the length of time this treatment had been carried on.

D. Tables showing Condition of the Blood in Male Epileptic Patients treated with 90 grain doses daily of Bromide of Potassium for different periods.

I. Five Epileptic Patients on Admission.

No.	Age.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red Corpuscles.
1	45	65	87·9	1 to 320
2	20	68	82·4	1 to 350
3	38	68	82·9	1 to 220
4	26	60	76·9	1 to 200
5	27	62	81·3	1 to 410
Averages	31·2	64·6	82·28	1 to 300

II. Five Patients who have taken Bromide of Potassium continuously for more than Two and less than Five Years.

No.	Age.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red Corpuscles.
1	29	68	88·5	1 to 350
2	27	70	92·7	1 to 220
3	29	72	93·8	1 to 190
4	34	72	88·2	1 to 380
5	22	75	89·4	1 to 400
Averages	28·2	71·4	90·52	1 to 308

III. Five Patients who have taken Bromide of Potassium continuously for more than Two and less than Five Years.

No.	Age.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red Corpuscles.
1	23	75	87·9	1 to 500
2	44	60	85·4	1 to 380
3	33	74	89·2	1 to 380
4	33	75	90·8	1 to 310
5	31	80	93·2	1 to 240
Averages	32·8	72·8	89·3	1 to 362

IV. Five Patients who have taken Bromide of Potassium continuously for more than Ten and less than Fifteen Years.

No.	Age.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red Corpuscles.
1	36	60	85·3	1 to 400
2	33	75	96·3	1 to 340
3	49	70	90·1	1 to 360
4	32	80	93·2	1 to 360
5	35	72	89·6	1 to 340
Averages	37	71·4	90·9	1 to 360

V. Five Patients who have taken Bromide of Potassium continuously for over Fifteen Years.

No.	Age.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red Corpuscles.
1	53	70	89·6	1 to 440
2	41	70	86·2	1 to 480
3	32	60	85·7	1 to 560
4	53	75	90·6	1 to 380
5	66	65	90·7	1 to 220
Averages	49	68	88·56	1 to 416

Clouston * states that patients gain in health and weight while taking average doses of Bromide of Potassium, and his observations are corroborated by Hughes Bennett † in a recent paper on the prolonged administration of the Bromides in Epilepsy.

Analysing the tables (D) we find:—(1) As to hæmoglobin, that on admission the average percentage is considerably below the normal standard; that the blood improves in this respect during the first 10 years of treatment, after which there is a slight decrease; and that the percentage of hæmoglobin in epileptic dements is slightly higher than in ordinary dements at the same age. (2) That the average amount of hæmacytes in the blood of Epileptic patients when admitted is almost 20 per cent. below the normal standard; that with slight fluctuations the blood improves during the next 15 years, after which there is a slight deterioration; and that the percentage of hæmacytes is a fraction higher in epileptics than in dements at the same age. (3) That the proportion of white to red corpuscles diminishes in ratio to the period of residence. (4) That the quality of the blood improves during treatment with bromide of potassium, and that the prolonged use of the drug exercises no deteriorating influence in decreasing the percentages of hæmoglobin and of hæmacytes.

There was considerable variation in the size of the individual corpuscles. In two instances more than one-fourth of the hæmacytes were of large size. These cases were Nos. 1 and 2 in Table III., and probably this fact influenced the average percentage in this group; for, as I have already stated, the larger the individual corpuscles, the fewer can be counted in the square of the hæmacytometer. In Nos. 2 and 4 in Table IV. the larger proportion of the corpuscles were small in size, and this, of course, would affect the general average in the opposite direction. In several other instances the blood-cells were of varying size, but not to such a marked extent as in any way to affect the results. Crenated corpuscles were observed in about half the cases, and cells with irregular outlines were occasionally met with. Small spherical bodies were noticed in a large proportion of the cases, especially in the first three groups.

IV.

In order to ascertain what variations occur in the blood of patients subject to periodic attacks of excitement, I selected

* "Journal of Mental Science," Oct., 1868.

† "Lancet," 1884, Vol. i, page 883.

six female patients of this class and made a series of observations on their blood. The number of observations was 68. As it is difficult to represent the results in a tabular form without taking up more space than the limits of a short paper will allow, I shall not attempt to do more than summarise the series of observations as briefly as possible.

In two instances the observations represent a period of one year. Twenty-three observations in the case of one, and 20 in that of another patient. In other two the observations were taken over a period of nine months, eight in one case, seven in another. In the two remaining cases five observations were made on each, within a period of six months. The ages of the patients varied from 18 to 44 years, and with one exception they had resided in the asylum for over a year. The observations were made on each patient in all the various stages of the attacks of excitement, and also in the intervals between the attacks when the patient was either in a quiescent, partly demented condition, or on the other hand was to all appearance in a normal mental state.

In the two patients in whom the observations were continued periodically for a year each passed through seven attacks of excitement, varying in duration from 30 hours to two months. In the cases where the observations represent a period of nine months' duration, and in one of those during a period of six months, there were three attacks of excitement in each. In the remaining case there were two outbursts of maniacal excitement. Of these six individuals two have been discharged recovered, one has drifted into dementia, and three continue to have periodic attacks of excitement.

The weights of the patients were taken periodically. Considerable variation occurred in each instance. One patient lost 12lbs. in one month during a prolonged attack of excitement, while another gained 8lbs. in three weeks of freedom from excitement between two attacks. Short periods of excitement had little effect in altering the weight, but when a maniacal outburst lasted over a fortnight there was usually a sensible diminution in weight. The two cases which recovered were those which showed the least depreciation in weight even during the periods of excitement, and were likewise those in which the greatest gain in weight took place.

The percentage amount of hæmoglobin varied from 56 to 80. The lowest percentage occurred during the fifth week of an attack of excitement, the highest was registered when the patient had kept free of excitement for 28 days, and two days

before the commencement of another maniacal outburst. The greatest variation in an individual case was from 58 per cent. to 80 per cent. In the earlier period of the attacks of excitement the hæmoglobin in many instances did not diminish in quantity, and in two instances the patient passed through an attack of excitement of a week's duration, leaving the percentage of hæmoglobin higher at the end of the attack than it was at the commencement. This, however, was exceptional, and in 14 of the 25 attacks of excitement represented by these six individuals, the amount of hæmoglobin diminished during the attack; in the remaining nine attacks no change in the percentage of hæmoglobin was recorded. With a few trivial fluctuations, the decrease in the percentage of hæmoglobin progressed in apparent ratio with the length and severity of the attack of excitement.

The lowest percentage of hæmacytes recorded was 79·7, and the occasion was the 13th day of an acute attack of excitement which rapidly followed a similar attack lasting one month. The highest percentage (93·6) occurred in the same patient during convalescence from a third attack of excitement. This patient had no further relapse, and has since been discharged recovered.

The greatest fluctuation in the amount of hæmacytes in the three cases which remain *in statu quo* is also worthy of remark. In one case the highest percentage (91·8) was registered on the seventh day, after an attack of excitement had passed off; the lowest (81·3) on the 19th day of an acute maniacal attack. In the second case the highest percentage (88·7) occurred on the second day of an acute attack of excitement, the patient having been quiet for three weeks previously, the longest period of freedom from excitement during the year; the lowest percentage (80·7) on the third day after settling down from an attack of excitement which had lasted two months. In the third case the highest percentage was 89·6, and the lowest 84·5; the one occurred during a period of freedom from excitement, the other during a prolonged maniacal seizure.

In the 68 observations with the hæmacytometer 30 were taken when the patients were free of excitement, 38 while they were in an excited state. The average of the first observations was 87·8, that of the second series 84·8 per cent. Thus we see that, taking the cases in bulk, there was a decrease of three per cent. in the observations made while the patients were excited. Though there are a few exceptions, this fact is brought out in an examination of the individual cases and of the

individual attacks. As in the case of the hæmoglobin, the decrease apparently progresses in relation to the length and severity of the attack of excitement. Another noteworthy point is that the decrease in the percentage of hæmacytes during an attack of excitement progresses more rapidly than the increase during convalescence or between attacks. For example, in one case the percentage of hæmacytes decreased in 14 days during an attack of excitement from 87·5 to 81·3; for the next fortnight the patient kept free of excitement, and during that time the percentage only increased to 84·4.

The proportion of white to red corpuscles varied from 1 in 170, to 1 in 480. The average of the 68 observations was 1 in 312. There were considerable variations in the proportions in each of the six cases, the proportions in one individual fluctuating between 1 in 210, and 1 in 410. These fluctuations, however, did not occur in any constant ratio to the mental condition of the patients at the time of the observation. Although the proportion of white corpuscles was higher in the observations during the periods of freedom from excitement (30 observations, 1 in 317; 38 observations, 1 in 308), the variations were so numerous and irregular that no general conclusion was possible. Crenated corpuscles were observed more frequently in the periods of quiescence than when the patients were excited. Small and irregular forms were more numerous during the excited stage, while small granule cells were observed with equal frequency at both periods.

A more extended series of observations and greater frequency of examination in individual cases are necessary before one is justified in forming many deductions from the foregoing researches on the blood of female patients subject to attacks of periodic mania. There is one possible source of fallacy to which my attention was not drawn till I had completed my observations, and which in a great measure detracts from the scientific value of this portion of the subject. I refer to the influence of the catamenia in lowering the percentage of the blood corpuscles. Hunt * in a large number of observations on chlorotic anæmia, has shown that a definite numerical fall in the number of hæmacytes occurs shortly before the onset of the menstrual flow, and other observers, notably Gowers † and Willcocks' ‡ have made similar statements. It would be

* "Lancet," July 17th, 1880. † "Practitioner," Vol. xxi, p. 11.

‡ "Practitioner," Vol. xxxi, page 103.

advisable, therefore, in view of this statement, to pay attention to the menstrual period in any further observations.

I therefore submit the following deductions, recognising that the results may possibly be fallacious :—

(1.) Prolonged periods of excitement cause a reduction in weight.

(2.) The percentage of hæmoglobin is less during an attack of excitement than in the periods of quiet preceding and following the attack.

(3.) During an attack of excitement the average amount of hæmacytes is less, and small forms are more numerous than in periods of freedom from excitement.

(4.) Maniacal attacks do not appear to influence to any great extent the relative proportion of white to red copuscles.

(5.) The more prolonged and severe the attack of excitement the greater is the deterioration in the quality of the blood.

V.

The tables in this section (E 1 and E 2) represent fifteen consecutive admissions of either sex. These may, I think, be regarded as fairly typical examples of the class of patients admitted to asylums. None of the cases were transfers from other asylums.

The points in the tables which call for special comment are—(1) The ages of the male patients vary from 20 to 58 years, average 36·5 years; the females from 21 to 63 years, average 35·4 years. There appears to be no uniform relation between the ages of the respective individuals and the quality of their blood. (2) The weights also show considerable variation, between 108 lbs. the lowest and 164 lbs. the highest for men; and 83 lbs. and 154 lbs. for women, the respective average weights being 136·7 lbs. and 110·2 lbs. The relation of the weight to the quality of the blood is by no means constant, although the blood of the larger proportion of the heavier patients is richer in hæmoglobin and in hæmacytes than in the case of the male patients whose weights are below 128 lbs., and the female patients below 100 lbs. (3) The duration of the mental symptoms on admission varies from one week to four years in men, and from three days to two years in women. There appears to be some connection between the duration of the attack and the amount of hæmoglobin and hæmacytes in the blood. In the male series, of six cases with a percentage of hæmoglobin of 70 or over, in five the symptoms had lasted under a month, while in three of the four highest percentages

of hæmacytes the mental disease was of short duration (ten days and under). A prolonged duration of attack does not however necessarily cause a deterioration, for in the four cases where the symptoms had lasted a year and upwards the average amount of hæmoglobin is 68, and the average of hæmacytes 87 per cent., or a fraction above the averages in the tables. While the exceptions are more numerous in the female group, in these also the blood appears to deteriorate in quantity of hæmoglobin and hæmacytes *pari passu* with the length and severity of the attack. (4) The quality of the blood varies considerably in the different types of mental disease. In the three epileptics in Table E. I., the average amount of hæmoglobin is 2 per cent. below the average for the fifteen cases, while the average percentage of hæmacytes is reduced to 80·7. General Paralytics also have a low percentage of hæmoglobin, while the amount of hæmacytes is above the average in the table. In the melancholic type the hæmoglobin is below, and the hæmacytes are above the general averages. The highest percentages of hæmoglobin and hæmacytes are found in the three cases of acute mania, and in one patient suffering from *delirium tremens*. In the remaining cases of mania there are considerable fluctuations in the quality of the blood. In Table E. II., the average percentages of hæmoglobin and hæmacytes in the eight cases of mania are 61 and 78; in the five cases of melancholia 59·2 and 81·5. In other words, the hæmacytes are below the average of the fifteen cases in mania, while the hæmoglobin is decreased and the hæmacytes are increased in melancholia. (5) Seven men and seven women are stated to be in weak bodily health. Only three of these had active physical disease, viz., one man convalescing from an attack of pneumonia, and two women in a very feeble state suffering from bronchitis. The bodily health does not appear to affect the quality of the blood in a uniform ratio, for the three patients, physically ill, occupy a middle position in the series in this respect, and one female in good bodily health has a low percentage of hæmoglobin and hæmacytes. (6) In males the percentage of hæmoglobin is almost 30 below the normal standard, the average of the fifteen cases being 67·2, the same amount as registered in the case of dements of the same age. In females the percentage varies in individual cases from 50 to 70, with an average amount of 61, or 24 per cent. below the normal standard. (7) The average amount of hæmacytes is 86·9 per cent. for men, and 80·4 for women. In no case does the amount reach the normal standard, and in the male series

E. I.—Table of Fifteen Consecutive Male Admissions.

No.	Age.	Weight in lbs.	Duration of Attack.	Mental Disease.	Bodily Health.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red B. C.
1	40	164	Over a year	Melancholia	Weak	68	89.1	1 to 310
2	58	158	10 weeks	General Paralysis ...	Weak	66	88·4	1 to 260
3	43	154	8 days	Acute Mania	Weak	62	90·9	1 to 180
4	21	112	One month	Mania	Average... ...	60	87·1	1 to 220
5	20	108	Three years	Epileptic Mania	Weak	68	82·4	1 to 350
6	47	140	One week	Mania	Good	70	88·9	1 to 480
7	23	122	One month	Mania	Weak	70	87·6	1 to 320
8	20	112	Two years	Mania	Average... ...	74	90·5	1 to 220
9	52	142	10 days	Mania à potu	Weak	78	90	1 to 280
10	36	151	14 days	General Paralysis	Average... ...	62	88·1	1 to 350
11	32	140	One week	Mania	Good	70	84	1 to 220
12	38	134	Three months ...	Epileptic Mania	Average... ...	68	82·9	1 to 220
13	34	136	Two days	Acute Mania	Average... ...	70	90·9	1 to 320
14	26	128	Two weeks	Epileptic Mania	Average... ...	60	76·9	1 to 200
15	58	150	Four years	Melancholia	Weak	62	86·1	1 to 380
Averages	36·5	136·7				67·2	86·92	1 to 289

E. II.—Table of Fifteen Consecutive Female Admissions.

No.	Age.	Weight in lbs.	Duration of Attack.	Mental disease.	Bodily Health.	Percentage of Hæmoglobin.	Percentage of Hæmacytes.	Proportion of White to Red B. C.
1	21	128	One month	Mania	Average ...	58	78	1 to 200
2	34	90	Two weeks	Melancholia	Weak	50	80·5	1 to 280
3	33	100	Two months ...	Mania	Average ...	65	85·9	1 to 300
4	30	100	One year	Mania	Weak	56	64·2	1 to 360
5	35	112	Three months ...	Melancholia	Average ...	64	76·3	1 to 360
6	41	104	Two weeks	Mania	Average ...	62	77·7	1 to 400
7	63	90	One week	Dementia...	Very feeble ...	62	84	1 to 260
8	31	83	Two years	Melancholia	Very weak ...	60	82·1	1 to 400
9	26	132	Three months ...	Mania	Average ...	70	88·2	1 to 280
10	22	154	Three weeks... ...	Mania	Good	58	76·7	1 to 420
11	27	112	Seven months ...	Melancholia	Average ...	62	82·6	1 to 300
12	37	104	Two years	Melancholia	Average ...	60	86·1	1 to 440
13	50	121	Three days	Mania	Weak	65	79·3	1 to 250
14	52	110	One year	Mania	Weak	60	78·1	1 to 340
15	29	114	One week	Puerperal Mania	Weak	64	86·3	1 to 210
Averages	35·4	110·2				61	80·4	1 to 320

F. I.—Table of Ten Consecutive Male Recoveries.

No.	Age.	Weight.		Period of Residence.	Mental Disease.	Percentage of Hæmoglobin.		Percentage of Hæmacytes.		Proportion of White to Red Corpuscles on Discharge.
		On Admission.	On Discharge.			On Admission.	On Discharge.	On Admission.	On Discharge.	
1	42	160	175	Over 2 months ...	Melancholia ...		82		101·7	1 to 350
2	22	146	161	Over 1 month ...	Acute Mania ...	70	76	90·5	90·9	1 to 190
3	60	166	166	Over 4 months ...	Melancholia ...	62	72	84·7	91·5	1 to 340
4	39	158	164	Over 1 month ...	Mania	70	80	88·8	97·4	1 to 440
5	45	130	150	Over 5 months ...	Mania	70	85	88·9	97	1 to 420
6	27	126	142	Over 19 months ...	Mania		86		92·7	1 to 300
7	75	150	174	Over 3 months ...	Melancholia ...	58	70	75·9	87·9	1 to 440
8	52	142	151	Over 1 month ...	Mania à potu ...	78	84	90	92·1	1 to 360
9	15	101	115	Over 6 months ...	Mania	60	75	77·3	91·3	1 to 320
10	29	164	168	Over 15 months ...	Mania		80		95·7	1 to 280
Averages	40·6	144·3	156·6	5·7 months		*66·8	79·0	*85·1	93·82	1 to 344

* Average of seven observations.

F. II.—Table of Ten Consecutive Female Recoveries.

No.	Age.	Weight.		Period of Residence.	Mental Disease.	Percentage of Hæmoglobin.		Percentage of Hæmacytes.		Proportion of White to Red Corpuscles on Discharge.
		On Admission.	On Discharge.			On Admission.	On Discharge.	On Admission.	On Discharge	
1	21	128	138	Over 3 months ...	Mania	58	80	87·1	94	1 to 220
2	28	93	129	Over 5 months ...	Puerperal Mania	65	78	76·2	91·1	1 to 580
3	30	124	124	Over 6 months ...	Melancholia ...	65	78	87·9	91·5	1 to 340
4	22	106	124	Over 4 months ...	Mania	55	65	81·4	90·2	1 to 280
5	20	126	124	Over 18 months...	Melancholia ...		70		90·9	1 to 240
6	32	134	138	Over 4 months ...	Mania	62	85	84·3	95·5	1 to 210
7	40	126	154	Over 19 months...	Melancholia ...		78		93·1	1 to 320
8	19	92	138	Over 10 months...	Acute Mania ...	58	75	82·7	92·1	1 to 450
9	33	112	114	Over 19 months...	Mania...		80		88	1 to 430
10	50	136	154	Over 8 months ...	Melancholia ...	60	78	80·5	91·6	1 to 220
Averages	29·5	117·7	133·7	8 6 months		*60·4	76·7	*82·8	91·8	1 to 329

* Average of seven observations.

the average is 3 per cent. below that of dements at the same age. (8) The average proportion of white to red corpuscles is increased, especially in the male admissions. In individual instances the fluctuations appear to bear no definite ratio either to the duration of attack or to the mental disease, although, speaking generally, the increase is more obvious when the attack is of short duration, and in the types of mental disease represented by Acute Mania, General Paralysis, and Epilepsy. The individual corpuscles in this series were regular, and, for the most part, uniform in size, though cells of small size were seen in several of the observations. Small granule-cells were seen in less than a third of the cases.

VI.

An examination of the blood of ten consecutive recoveries of either sex, as represented in the foregoing tables (F. I. and F. II.), furnishes us with some interesting and very uniform results :—The average age of the men is more than 10 years over that of the women. With two exceptions, one male who remained stationary and one female who lost 2 lbs., there is a uniform gain in weight in these patients during their residence in the asylum. The average amount gained by men is 12·3 lbs. in 5·7 months; by women 16 lbs. in 8·6 months. Some of the gains in weight are very remarkable, one man gaining 24 lbs. in three months, another 20 lbs. in five months, and a third 15 lbs. in two months, while one woman gained 46 lbs. in nine months, another 36 lbs. in five months, and a third 18 lbs. in four months. In seven cases of either sex the blood was examined on admission, the remaining six cases having been admitted before I commenced the series of observations. Without an exception, the blood in these cases is richer in hæmoglobin and in hæmacytes on discharge than when the patients were admitted. In males the average percentage of hæmoglobin on admission is 66·8, that of these seven cases on discharge 77·4, while the average for the ten cases is 79. The average percentage of hæmacytes is 85·1 on admission, that of the seven cases on discharge 92·4, while the average of the ten cases is 93·82. In females the respective percentages are hæmoglobin 60·4 on admission; 77 for seven cases and 76·7 for ten cases on discharge; hæmacytes 82·8 on admission, 92·2 for seven cases and 91·8 for ten cases on discharge. We thus see that there is an individual and a collective gain in the richness of the blood among patients

who recover. The improvement is more noticeable, and the percentages of hæmoglobin and hæmacytes approach more nearly the normal standard, in the case of female recoveries than in those of males. In neither sex does the period of residence or the type of mental disease appear to affect the quality of the blood in any uniform ratio.

The proportion of white to red corpuscles is rather higher than normal, the average being 1 to 344 in men and 1 to 329 in women. The individual corpuscles were regular in outline, and large and small cells were observed with greater frequency than in normal blood. Small forms especially were numerous. Clusters of hæmatoblasts were seen in all the cases.

Of the 20 patients, eight men and seven women had tonic treatment. The average per cent. of hæmoglobin in these 15 cases was 80 for men, 76·8 for women; the average percentage of hæmacytes, men 94·5, women 92·3. In other words the blood showed greater improvement in those who had undergone a course of tonics than in those who had no medical treatment.

VII.

The influence of tonics on the quality of the blood of patients during the early period of residence in asylums is an interesting and important study. I hope on some future occasion, after making a sufficient number of observations, to treat this subject at greater length than I am able to do at present.

The following remarks are based on a series of 130 observations on 22 individuals—15 men and seven women. The number of observations on individual cases varied from three to ten, and the period of time represented by each series from six weeks to eleven months. Of the 22 cases, eight have recovered, six are convalescing, one has died, and seven have not improved. Tonic treatment was administered to the patients on ordinary general principles, and their blood was examined while they were undergoing the particular line of treatment. By this I mean that the patients were not selected and then given special treatment with the view of collecting data for this enquiry.

For the sake of comparison, I examined the blood of three patients who were not receiving any tonic treatment; these represent 20 of the 130 observations. One case was treated with cod-liver oil, extract of malt, and quassia respectively, two with arsenic, three with iron, seven with iron and quinine, and four with a combination of iron, quinine, and strychnia.

The ages ranged from 16 to 62 years. The only remark

which calls for comment under this head is that the improvement in the quality of the blood was more pronounced in the young, and in those advanced in years, than in the middle-aged. In the aggregate the 22 patients gained 179 lbs in 78 months, or an average of 8·1 lb. in 3·5 months; 18 gained an aggregate of 188 lbs., three lost an aggregate of 9 lbs., and one remained stationary. The average percentage of hæmoglobin in the first observations on each individual, *i.e.*, before the treatment was commenced, was 61; in the last observations, or when the treatment was discontinued, 70. In 18 cases there was a definite increase varying from six to twenty per cent., in two a diminution—eight per cent. in one case, nine per cent. in the other; while two cases did not vary. The average amount of hæmacytes was 81·1 for the first observation, 89·2 for the last. The percentage was increased in twenty cases, the gain fluctuating between 1·9 the lowest and 26·3 the highest amount gained. In two cases there was loss, but in neither instance did this exceed two per cent. The proportion of white to red corpuscles showed considerable variations, but not in any definite direction. The average of the first observation was 1 to 384, of the last 1 to 320. Hæmatoblasts were seen in nearly all of the observations, the exceptions being the first observation in three cases, and the last observation in the individual who died. Many of the red-blood corpuscles throughout the series were of smaller size than normal, and in addition were feebly coloured. In no case did the blood show any marked deterioration after the tonic treatment was discontinued.

The cases which had no medical treatment, and those treated with cod-liver oil and a bitter tonic (quassia), differed from the rest of the series in that there were considerable fluctuations in the quality of the blood at the different periods. In the instances where an increase in the amount of hæmoglobin and hæmacytes was recorded this did not take place uniformly, and the total increase did not amount to 10 per cent. in either case. On the other hand the blood of those in whom iron, either alone or in combination, formed part of the treatment, varied in a definite and particular way. For the first fortnight the hæmoglobin remained stationary, while the amount of hæmacytes was largely increased. In the third and fourth weeks the hæmoglobin continued stationary and the hæmacytes were diminished. During the second month the hæmoglobin was slightly increased in all the cases, while the percentage of hæmacytes increased in the patients progressing towards mental recovery, but diminished in the others. In each instance improvement in the amount of hæmacytes preceded

the increase in the percentage of hæmoglobin. The greatest increase was observed in the cases treated with iron, quinine, and strychnia, next in those treated with iron and quinine, and a less though quite a definite improvement in quality in those treated with iron alone. The blood in the two patients treated for two months with arsenic showed slight variation in the quantity of hæmoglobin and hæmacytes; in both cases the treatment was changed to iron and quassia when a definite improvement took place. Considerable improvement was observed in the case treated with extract of malt. The increase in the amount of the hæmoglobin and hæmacytes was gradual and progressive, and, as in the cases where iron was given, the blood improved in hæmacytes before the percentage of hæmoglobin was much increased. In every instance where there was a marked increase in weight the quality of the blood improved. While this improvement was more noticeable in cases which improved, or were mentally convalescing, it also occurred to some extent in the others.

I have not sufficient data to discuss the effect of mental relapses and maniacal outbursts in these cases, and I regret that the limits of the paper prevent my giving the whole series of observations in tabular form. The influence of large and small doses of the various tonics on cases of recent admission must be omitted for similar reasons. Indeed I feel diffident in attempting to discuss the subject of blood-tonics in a fragmentary form before my observations have been completed, and my only excuse is that the paper should contain at least an introduction to this, the practical outcome of the whole subject. The observations I have made so far are encouraging, and sufficiently uniform to enable one to anticipate valuable and accurate results if this method of clinical research is persevered in, and engages the attention of several observers.

VIII.

Summary.—I have endeavoured to approach the subject from an unbiassed and scientific standpoint, to avoid theorising and to arrive at my deductions only from observed facts. Each series of observations has been summed up and commented on separately, but the following general conclusions seem warranted :—

(1.) While there is no evidence to show that anæmia in itself is a cause of insanity, yet an anæmic condition of the blood is undoubtedly in many cases intimately associated with mental disease.

(2.) The blood in the demented class of asylum patients is

deficient in hæmoglobin and in hæmacytes, and the deterioration progresses as age advances.

(3.) The blood in patients known to be addicted to masturbation is deteriorated in a marked degree.

(4.) The blood is below the normal standard in General Paralysis, and the deficiency is greater in the active and completely paralysed stages of the disease than in the intervening periods of inactivity and quiescence.

(5.) While there is a deficiency in the quality of the blood in Epileptics, the decrease is not so pronounced as in ordinary dements at the same age.

(6.) Prolonged and continuous doses of Bromide of Potassium do not cause deterioration in the quality of the blood.

(7.) Prolonged attacks of excitement have a deteriorating influence on the quality of the blood.

(8.) The blood of the average number of patients on admission is considerably below the normal standard.

(9.) In patients who recover, the quality of their blood improves during residence in the asylum, and on discharge is not much below the normal standard.

(10.) There appears to be a close connection between gain in weight, improvement in the quality of the blood, and mental recovery.

(11.) While there is a definite improvement in the condition of the blood during mental convalescence in all cases, the improvement is both more pronounced and more rapid in those who have had tonic treatment.

(12.) The four tonics which either alone or in combination proved most efficacious in restoring the quality of the blood as shown by these observations may be classed in order of value thus (*a*) iron, quinine and strychnia (*b*) iron and quinine (*c*) iron alone (*d*) malt extract.

(13.) Arsenic proved of little value as a blood tonic in these cases, and the observations with quassia and cod-liver oil did not give satisfactory results.

(14.) The close connection which exists between improvement in the quality of the blood, increase in weight, and mental recovery, the converse which exists in cases of persistent and incurable dementia, and the marked improvement which is effected by certain remedial agents, show that this line of clinical research, more especially with reference to the curative treatment of the insane, should have more attention paid to it than has hitherto been the case.

On Uterine Disease and Insanity.—By JOSEPH WIGLESWORTH, M.D. Lond., Assistant Medical Officer, Rainhill Asylum.

The question of the relation between Uterine Disease and Insanity is one which, though at different times it has attracted much attention, is yet very far from being thoroughly elucidated. On the one hand the subject is mixed up with so-called "Hysterical Insanity," and on the other with "Amenorrhœal Insanity," concerning the former of which it may be said that but little evidence has been advanced to prove its dependence upon distinct physical disease in the internal organs of reproduction; and, as regards the latter, it needs but little observation in an asylum to show that in the *majority* of cases in which Amenorrhœa is associated with insanity, the suppression of the menses is merely a symptom, and in no sense the cause of the disease.

Again, under the head of "Ovario-Mania," Dr. Skae described a form of insanity connected with the sexual organs, in which delusions as to intercourse were common. He says* "I have long believed that all such cases were connected with diseases of the ovaries or neighbouring parts, acting on them by direct irritation, and by reflex action on the nervous centres. I have uniformly found such disease in every case where I have had an opportunity of making a post-mortem examination." Dr. Clouston, following Dr. Skae, refers† to the same disorder under the head of "Old Maid's Insanity," and the same subject is alluded to by Drs. Bucknill and Hack Tuke, who say,‡ "A form of disease has been described by Dr. Skae under the head of Utero-Mania or Ovario-Mania, to designate cases of insanity in old maids associated with delusions as to sexual intercourse." The general ætiological relation, however, between diseases of the internal organs of reproduction in women and insanity, is a subject to some extent outside of those enumerated above.

It may be impossible to say, indeed, of any individual case of Uterine or Ovarian disease, that it was the cause of the insanity, but by the systematic examination of the uterus and its appendages in a large number of insane individuals error may be eliminated, and the relative frequency of disease of these parts in lunatics may be approximately ascertained. The subject does not

* "The Morisonian Lectures on Insanity for 1873," by Dr. Skae and Dr. Clouston. "Journal of Mental Science," Vol. xx, p. 10.
† "Clinical Lectures on Mental Diseases," p 478.
‡ "A Manual of Psychological Medicine," 4th edition, p. 348.

appear to have been much investigated on these lines in this country; at least, I have not come across many records of observations. On the continent, however, it would seem to be otherwise. By a reference to the "German Retrospect" in the "Journal of Mental Science" for October, 1883, it will be seen that, as there stated* "there is great variance of opinion about the frequency of diseases of the genital organs in insane women," one author placing it as low as 6 per cent., and another as high as 80 per cent.

A lady physician in the United States, Dr. Cleaves, found that "of eighty-five patients admitted under her care at Harrisburg in a period of twelve months, twenty-nine suffered from utero-ovarian disease of some kind, and in a large proportion of those who so suffered, improvement in mental health followed rapidly on the treatment of the local disorder."†

In the Commissioners' Blue Book for the year 1882 "Uterine and Ovarian Disorders" figure as causes of insanity in 1·9 per cent. of the female admissions. I should myself be disposed to think that their influence was here much understated.‡

Theoretically we might suppose that uterine or ovarian disease might produce insanity in two ways—either by the direct irritation such disease might set up, in which case the symptoms would not improbably have a maniacal character—or by the wearing out of the system by prolonged pain and exhausting discharges, when melancholia would be the more likely form of mental alienation. That such diseases are common enough in the population at large without giving rise to insanity, is no argument against their having this effect in persons with unstable nervous organisations, and thus predisposed to attacks of mental disorder. Indeed, in every case of insanity, no matter what the cause assigned be, the personal predisposition of the individual is obviously a factor of the first importance. But theories are of very little use unless they stand the test of experience, and it is the main object of this paper to bring forward certain data which may assist us in forming correct conclusions on the question. The subject, then, here resolves itself into a record of observations made by myself, in part pathological and in part clinical; in the former case the result of a series of post-mortem examinations being described,

* p. 425.

† "British Medical Journal," Vol. i, p. 123. 1883.

‡ Dr. Tuke says, "The proportion of admissions from uterine disorders appears to be about 5, or taking female admissions only, 10 per cent. Among asylums for the opulent classes exclusively, the ascertained proportion would be higher, the real proportion higher still, among both poor and rich.—*Op. cit.*, p. 98.

and in the latter, that of a number of bedside examinations. The cases observed are given in detail in two tables, the first of which deals with the pathological aspect of the question, whilst the second approaches it from the clinical stand-point. The cases quoted in the one table are altogether distinct from those in the other. (For tables see pp. 520 *et seq.*)

I will now proceed to analyse the cases under these two heads.

I. *Pathological.*

Table I. gives the condition of the uterus and its appendages, as they were noted to be in 109 post-mortem examinations, made by myself, of patients who died in the asylum. The cases were altogether unselected, and were recorded just as they came under notice. Of these 109 cases, in 42—38·53 per cent.—the uterus and its appendages were perfectly normal, or at the most showed very trivial changes; whilst in the remaining 67—61·46 per cent.—the parts in question showed a greater or less degree of departure from the normal. From this latter category, however, important deductions have to be made in estimating a connection between the uterine disease and the patient's mental alienation. (1) In 15 of the abnormal cases—Nos. 8, 14, 15, 16, 17, 39, 46, 59, 68, 69, 82, 85, 97, 105, 108—the changes were very slight, and consisted in trivialities, such as very small fibromata, ecchymosis of mucous membrane of fundus, etc., which could have had no bearing on the mental symptoms. (2) In three cases—Nos. 2, 5, 8—the changes noted were secondary to parturition, and were, therefore, not abnormal as regards the then condition of the individual. (3) In one case—No. 4—the uterine affection was a purely secondary involvement, and of very recent origin. (4) In three cases—Nos. 12, 45, 63—the abnormalities were due to a general constitutional taint—tubercular—and were associated with tubercle in the lungs and other organs.

Deducting, then, these 22 cases from the 67 abnormal ones, we get 45—a percentage of 41·28—in which cases there was either congenital defect, or a degree of acquired abnormality requiring further investigation. First as regards congenital abnormalities. In one case—No. 21—the uterus was absent. In eight cases—Nos. 32, 50, 57, 59, 63, 77, 89, 92—the condition known as conical cervix, with pin-hole os, was present; in four of these cases, however, this condition was associated with other abnormalities, which brought them under the category of acquired abnormal cases; in the remainder the defect may, perhaps, be considered of little moment. It is indeed common enough in the community at large, but it would seem to be worth while to take note of it in connection with other possible

developmental defects, and when it is remembered how frequently this abnormality is associated with dysmenorrhœa and the constitutional disturbance so frequently dependent thereon, and that it is a direct cause of sterility, it is quite conceivable that in some cases it may be a factor in the production of insanity. If, however, we were to exclude these cases of developmental defects (when not associated with other lesion) we should narrow our total of abnormal cases to 40—36·69 per cent. This total includes very different cases and very different degrees of abnormality; whilst in many of them a connection with the mental symptoms would be at the most very problematical; in others it would be quite legitimate to infer such a dependence. It will be convenient to consider these 40 cases of acquired abnormality under the following heads:—

(1.) *Simple Displacement.*

Eleven cases—10·09 per cent. of the total number of cases—came under this category. They were divided as follows:—

(*a.*) *Retroversion.*—Four cases—Nos. 47, 64, 77, 78.
(*b.*) *Retroflexion.*—Five cases—Nos. 25, 37, 62, 80, 102.
(*c.*) *Retroflexion combined with Retroversion.*—One case—No. 44.
(*d.*) *Prolapse.*—One case—No. 70.

This last case was complicated with hypertrophy of the cervix. The patient was the subject of senile mania, and it is possible that the uterine affection may have been a factor in the production of the insanity. As regards the other cases, however, I should not be disposed to attach too much importance to them. Displacements are, as is well known, among the most common of uterine affections, and probably often receive at the hands of gynæcologists greater attention than they deserve. It cannot be denied, however, that they may occasionally be factors in the production of insanity.

(2.) *Enlargements of the Uterus.*

It may be difficult in any given case to say whether we have to deal with a simple enlargement, a genuine hypertrophy, or a subinvolution. I think, however, we shall not be far wrong in the case of a woman who has borne children, and in whom the uterus weighs 3oz. or more (tumours being, of course, excluded), in putting the case in the last category. No. 87 appeared to be a case of simple enlargement, but as it was associated with a pin-hole os, it would, perhaps, be more appropriate to include it under the head of congenital defects. I have marked five cases as examples of subinvolution—Nos. 9, 24, 27, 30, 84—(4·58 per cent. of the total number of cases). This condition, as is well known, is very common in the com-

munity at large, but because a condition is often met with without mental disorder, that is no reason why, in the case of a person predisposed to it, this may not be an important factor. I should myself be disposed to think that in certain cases it may prove an efficient cause of insanity; and this, not so much by the annoyance which the condition often entails, as by reason of the exhausting hæmorrhages, which are the too common concomitants of the affection. That frequent and considerable losses of blood may, by lowering the general tone of the system, predispose to insanity, can hardly be doubted. In case No. 30, these copious losses of blood had, indeed, taken place; and the impression conveyed to my mind, by the history of that case, was that the subinvolution was a not unimportant factor in the production of that patient's mental disorder.

(3.) *Uterine Fibromata.*

Excluding very small tumours, six cases belong to this category, viz., Nos. 31, 34, 41, 58, 75, 93—5·50 per cent. of the total number of cases. In Nos. 31 and 58 alone, however, did the tumours reach any very considerable size; but in these two cases there was evidence derived from the history of the patients, and the mental symptoms, that the tumours were important contributory causes in the production of the melancholia from which both patients suffered.

(4.) *Old Pelvic Inflammation.*

This was evidenced by the presence of old fibrous adhesions in Douglas' pouch, the fundus of the uterus being thus more or less adherent to the rectum and pelvic walls; the cases were mostly complicated with retroflexion. Six cases—Nos. 13, 19, 23, 60, 72, 90 (5·50 per cent.)—came under this category. It is, of course, impossible to say that the attack of pelvi-peritonitis or cellulitis, from which the patients must have suffered, may not in certain cases have had an influence in the production of the insanity, but I should not myself be disposed to rate that influence high.

(5.) *Hypertrophy and Induration of Lips of Cervix.*

One case, No. 53, came under this category. The condition pointed to a chronic inflammatory state of the cervix, which might during life have caused symptoms out of proportion to the small change noted after death, but the condition was probably of no moment whatever.

(6.) *Cancer of the Uterus.*

Only one case—No. 20—was of this character. The case was one of melancholia of five months' duration, and the impression conveyed by the observation of the case during life was that the uterine disease was an important factor in the

production of the patient's mental symptoms; these certainly got worse with the progress of the disease.

(7.) *Diseases of the Ovaries and Fallopian Tubes.*

Nine cases—8·25 per cent.—came under this heading.

In only one case—No. 89—was there uncomplicated cystic disease of the ovaries, and that was in a very early stage.

In one other case—No. 32—there was present a small dermoid tumour of the left ovary.

In three cases there was evidence of old chronic inflammation—cirrhosis in fact—of the ovaries. In No. 52 the affection was confined to the right side; whilst in Nos. 26 and 42 the condition was double.

In four other cases the affection of the ovaries was complicated with dilatation of the Fallopian tubes, and effusion of fluid into these. In some of these four cases the affection was clearly inflammatory, whilst in others it seemed impossible to pronounce definitely whether the collection of fluid was the result of imflammation or a simple dropsy. In No. 40 there was evidence of old perimetritis, together with peri-oophoritis and salpingitis. In No. 57 there was evidence of old inflammation both in ovaries and tubes. In Nos. 99 and 107 one or both ovaries were cystic, with effusion of fluid into the tubes. As regards the mental symptoms in these four cases, No. 40 was a case of subacute mania, with frequent outbursts of impulsive violence; No. 107 might be described as a moral imbecile, who was subject to violent outbreaks of temper; whilst No. 99 was an epileptic, who had pretty frequently very acute maniacal attacks; on the other hand, No. 57 presented an example of a quiet, demented, general paralytic. It cannot be denied that in the three first-mentioned cases the irritation that must almost certainly have been occasioned by the conditions described, may have had something to do with the violent maniacal outbreaks; and I think it a matter for consideration whether, had the disease been recognized during life, prompt removal of the uterine appendages might not have been attended with considerable benefit.

A condition to which I may just draw attention, which was several times met with, was a deep congestion or ecchymosis of the mucous membrane of the fundus uteri *in old people.* I am at a loss to account for the condition, which appeared to be due to an effusion of blood into or around the uterine follicles; Nos. 13, 15, 44, 62, 82, 108 were the cases met with. The lesion had clearly no clinical significance, as regards the mental symptoms at any rate, if only for the reason that it must certainly have been of very recent origin. These cases are, there-

fore, *not* included in the list of abnormal ones, of which an account has just been given.

II. *Clinical.*

Table II. gives the condition of the uterus and appendages in 65 insane individuals, as ascertained by examination during life. Clinical memoranda are clearly of more importance than pathological in determining the question of the frequency of uterine disease in insane women, for the latter dealing only with the conditions noted at the termination of what *may* be a long period, any disease existing at the commencement of the insanity may have had time to subside. Again, a uterine affection might spring up *after* the insanity had become confirmed, and no indication being afforded of the period of its commencement, might lead to the drawing of erroneous inferences. For the same reasons, the examination of cases in which the insanity is recent is of more importance than that of those in which it has become confirmed. Taking a "recent" case, to indicate that in which the insanity is of not more than a year's duration, the table before us deals with 27 "recent" cases of insanity and 31 "chronic;" whilst in seven the duration of the insanity has not been recorded. Before proceeding further with the analysis, however, I must say a word or two about the method of examination. In every case an anæsthetic —ether—was given. This is absolutely necessary in the great majority of cases, and advisable in all; and I may say at once that in no recent case of insanity have I seen any bad effect produced on the mental condition of the patient, either by the administration of the anæsthetic, or by the subsequent examination (of which, indeed, the patient is usually quite unconscious). In one or two chronic cases of mania there seemed for two or three days subsequently to be a little increase in the patients' noise and turbulence, but this was all; and, therefore, whilst not being prepared to deny that in certain cases the effect of these proceedings *might* be injurious, I think the experience here gained shows that they may be resorted to with much less hesitation than is, I think, commonly thought. As regards the examination itself, I made it a practice to give a dose of aperient medicine on the afternoon of the day preceding the examination, and on the morning of the examination a simple enema, to make sure of the rectum being thoroughly empty. Then, in addition to the usual methods of investigation by vaginal touch, speculum, and uterine sound, the bipolar method of examination has in all cases been resorted to—that is, two fingers of one hand were

introduced into the rectum, whilst the opposite hand pressed upon the abdominal parietes immediately above the pubes; by these means the contents of the pelvic cavity can be explored with a completeness which leaves little or nothing to be desired.

For obvious reasons, most of the cases examined have been married women. The majority of the cases were unselected, being taken just as they came under notice. A few cases, however, were specially singled out for examination, owing to the fact of sexual delusions, or other circumstances, causing a suspicion to fall upon the uterus. These cases, though few, have rendered the percentage of abnormal cases somewhat higher than it would have been had all the cases been taken at random.

To take the normal cases first. If we were only to take those which presented not the smallest trace of abnormality, we should only have nine out of the 65 to place in this category. In 26 other cases, however, the abnormalities present were so slight, that they might be considered practically normal. Such abnormalities consisted of trifling epithelial erosion of the lips of the os uteri, slight displacement, either forwards or backwards, etc., the departure from the normal being in all these cases so trivial, that to include them under the head of disease would be altogether misleading; I have, therefore, thought it best to include them under the head of "normal cases," which would cause 35 out of the total 65 to be placed in this category—a percentage of 53·84. In the remaining 30 cases, 46·15 per cent., some distinct abnormality or congenital deformity was present, though the amount and importance of this, as will be seen as we proceed, has varied considerably.

The abnormal cases may be classified under the following heads :*—

I. *Congenital Defects.*

Four cases were of this class. In one—No. 11—there was an imperfectly developed uterus, with absence of the os externum. Two cases, Nos. 2 and 44, were examples of conical cervix, with a very small os, the latter of these two being complicated with anteflexion of the fundus. No. 10 was an example of conical cervix without contraction at the orifice.

Remarks were made on this abnormality in the Pathological Section. All these four patients were nulliparae.

* Where a case presented two or three different abnormalities, it is classified under the head of that which seemed the most important.

II. *Acquired Abnormalities.*

(1.) *Displacements.*—These, as might be expected, are most important from a numerical point of view, no less than 13 of the abnormal cases coming under this category; of these, seven —Nos. 9, 15, 23, 38, 63, 64, 65—were examples of anteflexion, and one—No. 46—of anteflexion combined with anteversion; four—Nos. 16, 54, 56, 57—were cases of retroflexion, and one —No. 61—of prolapsus. This last case was complicated with hypertrophy of the cervix. As previously stated, all cases of *slight* displacement are excluded from these numbers, those only being here enumerated in which the condition was well-developed. We have, therefore, a percentage of 20·00 cases of displacement in an examination of 65 cases. This is doubtless a high percentage, but it would be easy to exaggerate the importance of it. It will be seen that the majority of the displacements were cases of anteflexion, and it is now known that this condition is very common in unmarried, nulliparous, women, without, in the majority of cases, any symptoms being produced.*

(2.) *Ulceration or Erosion of the lips of the os uteri.*

The condition here referred to is that in which the surfaces in question are stripped of epithelium, raw, red, and granular-looking ; it is described as "erosion" in the table. After excluding all quite trivial cases, five are left in which the condition was present in a marked degree—Nos. 18, 30, 35, 42, 48. The affection is, as is well-known, enormously common in women of all ages, who are often energetically treated for an "ulcerated womb," which it would sometimes have been better for the patient had it never been discovered. In its minor degrees the condition is sufficiently unimportant, and even when present to the extent met with in the five cases enumerated above, but little significance can be attached to it from our present point of view.

(3.) *Uterine Fibromata.*

Two cases—Nos. 4 and 33—were examples of fibroid tumours of the uterus; in the former sexual delusions were present, which will be referred to hereafter, but whether the tumour in this case had any ætiological relation to the patient's insanity cannot be determined, the mental alienation being of some years' duration.

(4.) *Subinvolution.*

One case—No. 1—was an example of this condition. The patient presented strongly-marked delusions as to sexual in-

* See a Leading Article in the "Lancet," 1883, Vol. ii, p. 286.

tercourse. The uterine affection was treated by the introduction of solid nitrate of silver into the fundus, by scarification of the os, etc., by which means the size of the uterus was much diminished, the length being reduced from 3½ to 2¾ inches. Correspondingly with this improvement, the mental symtoms seemed for a time in abeyance, but they soon returned in their pristine vigour, and no permanent improvement has resulted in this respect. Indeed, this could perhaps hardly have been expected, since the insanity was of at least 2½ years' duration, and probably much more; and even supposing that the insanity had been started by the uterine disease, the delusions had had plenty of time to get organically registered in the brain, and were thus probably in a position to exist by themselves, independently of the cause which started them.

(5.) *Hypertrophy of cervix with contraction of os.*

One case—No. 3—presented these characters in a slight degree.

(6.) *Old pelvic inflammation.*

In No. 31 it was inferred that old adhesions were present in Douglas' pouch, the uterus being deflected to the left, and showing deficient mobility in this situation.

(7.) *Diseases of the Ovaries.*

Thus far we have dealt with uterine affections only; the small number of cases in which the appendages were at all involved is somewhat striking; such lesions as were noted were confined to the ovaries.

Nos. 39 and 43 were examples of *Prolapse of the Ovaries* in Douglas' pouch where they would at least have been in a position to produce irritation; both cases were complicated with some displacement of the uterus.

In No. 58, the right ovary was a little enlarged. It may be remarked that in three other cases—Nos. 27, 38, 48—a slight enlargement of one ovary was met with; but as in these three cases the examination was made shortly after the menstrual period, the swelling was probably the usual physiological engorgement, etc., and these cases are therefore not considered abnormal.

Sexual Delusions.

It will be well to consider under a separate heading those cases of insanity which presented delusions having reference to the sexual organs. Nos. 1, 4, 16, 38, 46 were of this character; they all presented certain uterine abnormalities, and I may here remark that they include all the cases presenting sexual delusions, which have recently come under my notice.

In Nos. 1 and 16 the patients suffer from very prominent delusions as to sexual intercourse; they are both firmly persuaded that men cohabit with them at night. No. 1 has been already commented on, under the head of subinvolution. In No. 16 there was complete retroflexion of the uterus; this was reduced, and the organ maintained in its place by a Hodge's pessary; and it is interesting to note that the patient spontaneously remarked, two or three days after this was done, that she had not been so much troubled at night since she had been examined; she, however, subsequently removed the pessary, and refused to wear it any more, and her delusions now continue as before; her insanity is of many years' duration.

No. 4 presents very strong delusions as to torture being inflicted on her; she often complains bitterly that she is practised upon by instruments being put into her womb, and declares that her womb is torn out, etc.; these delusions have existed for two or three years at least, and appear clearly to depend upon the growth of a fibroid tumour in the fundus of the uterus. Though this tumour is not at present producing any marked physical effects, it is legitimate to enquire whether operative interference might not be justified, in order to rid the patient of what seems to be such a source of misery to her.

Nos. 38 and 46 both had whilst menstruating strong delusions that they were in labour, and in both of them the uterus was found to be anteflected, the anteflexion in No. 46 being combined with some amount of anteversion; the delusions were *only manifested during the menstrual period,* and were frequently and spontaneously expressed; they appear to have had a physical basis in the flexion of the uterus, which clearly (especially in No. 46) would have offered some obstacle to the free flow of the menstrual fluid; the increased contractions of the uterine fibre thus set up, being conducted to the uterine cerebral centre, gave birth to an idea—in this case erroneous, on account of the general disturbance and want of co-ordination in the cerebral plexuses. Of the two cases No. 46 certainly, and No. 38 probably, had experienced the sensations connected with labour, and had therefore presumably organised connections established in their brains dependent thereon; both patients were general paralytics.

This subject indeed—the connection of visceral disease with special delusions—is a very interesting one, and one which will doubtless repay further investigation.

Table I.—Showing the Condition of the Uterus and its Appendages in 109 Insane Individuals, as Ascertained by Examination after Death.

No.	Initials of Patient.	Age.	Social State.	Form of Mental Disorder.	Duration of ditto.	Condition of Uterus and Appendages.	Cause of Death.	Remarks.
1	A. I. ...	64	Widow...	Dementia ...	? 1 month	Uterus healthy=$1\frac{1}{4}$ oz. Ovaries very small	Cerebral atrophy	
2	H. R. ...	21	Married	Mania (puerperal)	3 weeks ...	Uterus enlarged=$3\frac{1}{2}$ oz. Some glairy bloody fluid at os. Mucous membrane of fundus injected. Ovaries normal; left contains an old corpus luteum, size of pea	Pneumonia ...	Confined 1 month
3	M. K. ...	58	Widow...	Mania	2 months	Uterus=$1\frac{1}{2}$ oz.; os small. Ovaries small, normal ...	Peritonitis	
4	M. McN.	38	Single ...	Melancholia ...	1 year ...	Uterus=$1\frac{1}{2}$ oz.; normal position; fundus normal, but lower two-thirds of cervix in a sloughy condition. Ovaries normal	Ascending central myelitis	The gangrenous condition of the cervix was continuous with a similar condition of the vagina, which had obviously spread upwards from the sloughing nates
5	J. L. H.	30	Married	Mania (acute) ..	10 days ...	Uterus considerably enlarged=$3\frac{3}{4}$ oz.; os patulous, and contains a little glairy mucus; fundus dilated and mucous membrane coated with a little pulpy reddish fluid. Ovaries normal	Exhaustion from mania	Aborted at third month, 4 days before commencement of attack
6	E. R. ...	30	Married	Acute dementia	1 month...	Uterus=2 oz.; fundus a little large; os somewhat hyperæmic. Ovaries normal; left contained a recent corpus luteum	? Disease of brain	Said to have been under treatment for uterine disease for 4 months prior to admission. When admitted was wearing an intra-uterine stem pessary
7	S. B. ...	41	Married	General paralysis	$2\frac{1}{4}$ years ...	Uterus=$1\frac{1}{2}$ oz., normal. Ovaries small and puckered ...	General paralysis	
8	M. A. L.	46	Married	Melancholia ...	15 months	Uterus=$1\frac{3}{4}$ oz.; os small. Several fibroid tumours in wall of fundus, varying from size of marble downwards. Ovaries normal, with the exception of a cyst size of pea in right	Phthisis	
9	M. K. ...	45	Married	General paralysis	$1\frac{1}{2}$ years ...	Uterus enlarged, weighing $3\frac{3}{4}$ oz., but otherwise apparently normal. Ovaries normal	Epileptiform convulsions	
10	M. B. ..	46	Married	Melancholia ...	6 months	Uterus=2 oz., normal. Ovaries normal	Phthisis	
11	A. S. ...	49	Married	Melancholia ...	$3\frac{1}{2}$ months	Uterus=$1\frac{1}{3}$ oz., normal. Ovaries small and puckered. Veins of broad ligament somewhat varicose, and contain a few fibrinous and slightly calcareous concretions	Pneumonic Phthisis	
12	M. A. G.	18	Single ...	Melancholia ...	18 months	Uterus=$\frac{3}{4}$ oz., small; fundus filled with caseous material, the mucous membrane having, apparently, been transformed into this; cervix healthy. Ovaries healthy	Phthisis	The affection of the uterus was doubtless tubercular

13	J. K. ...	65	Married	Senile dementia	4 years ...	Uterus=$1\frac{1}{2}$ oz., posterior part of fundus adherent to rectum; slight erosion at os; mucous membrane of fundus ecchymosed and cavity contains a little bloody mucus; a polypoid growth size of pea, projecting from mucous membrane. Ovaries very small; right contains one or two small cysts	Pneumonia	
14	E. F. ...	49	Married	Organic dementia	? 3 months	Uterus=$1\frac{1}{2}$ oz., springing from upper part of fundus on left side a calcified fibroid of irregular outline, size of small shelled walnut. Ovaries small, normal	Bright's disease	
15	J. K. ...	68	Widow...	Senile dementia	18 months	Uterus normal position and size. Mucous membrane of fundus quite black, as if converted into blood clot; this is, however, incorporated with mucous membrane, and cannot be scraped off. Ovaries very small and fibrous	Chronic bronchitis	
16	E. D. ...	21	Single ...	General paralysis	6 years ...	Uterus 1 oz., a little erosion about os. Ovaries apparently normal. A cyst, size of unshelled walnut, attached to outer end of right broad ligament	General paralysis	
17	E. H. K.	26	Married	Mania	1 month ...	Uterus=$1\frac{1}{2}$ oz.; distinct ulceration of margins of os, extending a little way into cervix; fundus healthy. Ovaries healthy	Exhaustion from mania	
18	H. M. ...	21	Single ...	Imbecility with epilepsy	... ...	Uterus=$1\frac{1}{8}$ oz.; slight epithelial abrasion at os. Ovaries normal	Epilepsy	
19	S. M. ...	54	Widow...	Melancholia ...	2 years ...	Uterus small, somewhat deflected to left side; old fibrous adhesions in Douglas' pouch; cavity of fundus contains a little viscid blood-stained fluid. Ovaries very small	Chronic myelitis	
20	M. L. ...	36	Widow...	Melancholia ...	5 months	Uterus enlarged and firmly adherent to surrounding parts, especially on left side. Edges of os and cavity of cervix throughout, ulcerated and thickened from new growth; this stopped short at internal os, and did not invade fundus, which was, however, decidedly enlarged; much indurated tissue adherent to posterior part of fundus, with which was incorporated the left ovary; a cyst, size of unshelled walnut, adherent to posterior part of fundus. Indurated tissue and uterus together weighed $8\frac{1}{2}$ oz. Right ovary healthy	Cancer of uterus	
21	M. M. ...	46	Married	Melancholia ...	6 weeks ...	Uterus absent, but represented apparently by an irregular nodule, about size of bean, in post-vesical folds of peritoneum. Right ovary apparently normal; left absent	? Cerebral atrophy	External genitals natural. Vagina terminated in a *cul-de-sac*, about an inch from orifice
22	E. W. ...	52	Single ...	Melancholia ...	5 weeks ...	Uterus=$1\frac{3}{4}$ oz., healthy. Ovaries small and puckered...	Gangrene of lungs	
23	E. L. ...	33	Widow...	General paralysis	$1\frac{1}{2}$ years ...	Uterus retroflected; fundus deflected to left side, and firmly adherent to pelvic walls and rectum by dense fibrous adhesions, with which the left ovary is incorporated; healthy internally. Weight, $1\frac{1}{2}$ oz. Right ovary small	General paralysis (Diarrhœa)	

No.	Initials of Patient.	Age.	Social State.	Form of Mental Disorder.	Duration of ditto.	Condition of Uterus and Appendages.	Cause of Death.	Remarks.
24	A. B. ...	57	Single ...	General paralysis	$1\frac{1}{2}$ years ...	Uterus=3 oz., enlarged; mucous membrane of cavity of fundus somewhat swollen, and surface smeared with a little red fluid. Ovaries very small and puckered	General paralysis (Phthisis)	Had had a child
25	H. B. ...	48	Married	Melancholia ...	3 weeks ...	Uterus=$2\frac{1}{2}$ oz., somewhat enlarged and retroflected, but otherwise quite healthy. Ovaries small and firm. A cyst, size of marble, in right broad ligament	Arachnoid hæmorrhage	
26	M. A. T.	36	Single ...	Melancholia ...	$1\frac{1}{2}$ years ...	Uterus=$2\frac{1}{4}$ oz., enlarged; muscle very pale. Ovaries mixed up with matted fibrous tissue, so that their structure could not clearly be differentiated from the surrounding broad ligaments. Fallopian tubes somewhat dilated, but contained no fluid	Phthisis	Had had several children
27	A. L. ...	45	Married	Melancholia ...	2 years ...	Uterus=3 oz., enlarged, but otherwise normal. Ovaries healthy	Phthisis	
28	G. W. ...	34	Married	Acute delirious mania	8 days ..	Uterus=$32\frac{1}{2}$ oz., nearly fills pelvis; walls thick and fleshy—about 1 inch; inner surface of fundus coated with thin shreds of black clot and placental structure, more or less adherent. Right ovary contained a solid corpus luteum, about 4 lines in diameter	Exhaustion from mania and parturition	Was far advanced in pregnancy when attack of mania commenced; died 47 hours after parturition
29	E. McE.	43	Married	Melancholia ...	7 months	Uterus=$1\frac{1}{2}$ oz.; os patulous; constriction at internal os; fundus contained a little viscid fluid	Bronchitis ...	Had been under treatment for uterine disease for some time prior to admission, and on admission was wearing a Hodges' pessary
30	E. F. ...	37	Married	Melancholia ...	11 months	Uterus=$2\frac{1}{2}$ oz., decidedly enlarged with tendency to retroflexion; a little abrasion about os. Right ovary contained a cyst, size of shelled walnut, with clear contents. Left ovary healthy	Suicide by hanging	
31	A. K. ...	34	Single ...	Melancholia ...	3 months	Uterus greatly expanded by a large fibroid tumour, which altogether formed a mass, nearly filling the abdomen, and being about the size of the uterus at full term; the tumour, which had expanded the wall of the uterus, could be shelled out of its capsule, and weighed 3lbs.; the uterus and capsule together weighed 2lbs. The uterine wall when cut into showed at one part sinuses patent, and filled with inspissated pus. Peritoneal surface of tumour reddened, with patches of puriform lymph	Puerperal metritis and peritonitis	Died 15 days after parturition. This was her second child
32	A. S. ...	50	Married	Melancholia ...	6 weeks ...	Uterus=3 oz.; conical cervix with very small os. Left ovary converted into a cyst, size of duck's egg, filled with sebaceous matter and hair	Arachnoid hæmorrhage	

33	E. G. ...	48	Married	Melancholia attonita	9 weeks ...	Uterus very small,=1 oz. Ovaries: right small and puckered; left contained a cyst, size of pea, with glairy contents	? Disease of brain	
34	I. S. ...	70	Married	Dementia (organic)	4 years ...	Uterus=$4\frac{1}{2}$ oz., enlarged and much distorted by several fibromata, from size of walnut downwards. Ovaries normal. Right broad ligament contained two cysts, size of walnut and marble respectively	Bright's disease and pericarditis	
35	M. A. D.	65	Widow...	Dementia (senile)	... ...	Uterus=1 oz. A small calcareous pedunculated fibroid attached to posterior part of fundus. Ovaries size of small beans	Peritonitis	
36	M. E. ...	19	Single ...	Dementia (organic)	... ...	Uterus=1 oz.; a little abrasion at os. Ovaries healthy	Mitral stenosis	
37	H. B. ...	47	Married	General paralysis	3 years ...	Uterus=$2\frac{1}{2}$ oz., retroflected; considerable erosion of lips of os. A polypoid tumour, size of small bean, in upper part of fundus, and a fibroma, size of walnut, in left lateral wall of organ	General paralysis	
38	S. B. ...	81	Widow...	Dementia (senile)	... ...	Uterus=$1\frac{1}{2}$ oz.; a little erosion at os. Ovaries small and puckered	Senile decay	
39	M. S. F.	39	Married	General paralysis	2 years ...	Uterus covered with small fibroids, from size of pea up to that of small (shelled) walnut=3 oz. Ovaries small and puckered	General paralysis	
40	H. P. ...	26	Single ...	Mania	2 years ...	Uterus retroverted and adherent to rectum by old fibrous adhesions in Douglas' pouch; weight, 2 oz. A small pedunculated fibroid tumour hanging from fundus. Ovaries: both contained one or two small cysts; some thickening and œdema of tissues of broad ligament around. Both Fallopian tubes occluded towards uterine extremities, and thickened here; their outer portions considerably distended, with thin smoky-coloured fluid	Congestion of lungs	
41	L. L. ...	36	Married	Melancholia, with epilepsy	... ...	Uterus=$3\frac{3}{4}$ oz., pushed over to left side; a fibroma in right wall, size of small hen's egg, partially calcified. Cavity of uterus contained a bloody mucoid fluid. Right ovary contained a large and quite recent corpus luteum	Suffocation in a fit	
42	M. E. ...	26	Married	Mania	6 weeks ...	Uterus=2 oz., healthy. Ovaries tough and fibrous, presenting on section numerous cicatrices	Pyæmia	
43	E. H. ...	30	Married	General paralysis	1 year ...	Uterus=1 oz., healthy. Ovaries healthy	General paralysis	
44	C. K. ...	54	Married	Dementia (organic)	4 years ...	Uterus=$1\frac{1}{4}$ oz., retroflected and partially retroverted; some ecchymosis of mucous membrane of fundus. Ovaries small and puckered	Disease of brain	
45	E. T. ...	58	Widow...	Melancholia ...	8 months	Uterus: cavity of fundus contained 2 or 3 drachms of purulent fluid; mucous membrane thickened, but not ulcerated. Ovaries small and puckered. Fallopian tubes distended, especially at abdominal extremity, and coiled upon themselves, the individual coils being adherent by soft adhesions; lining membrane of tubes flocculent, and cavities contain cheesy material	Phthisis and perforation of intestine by a tuberculous ulcer	The affection of the Fallopian tubes was, doubtless, tubercular

No.	Initials of Patient.	Age.	Social State.	Form of Mental Disorder.	Duration of ditto.	Condition of Uterus and Appendages.	Cause of Death.	Remarks.
46	J. C. ...	49	Married	General paralysis	... ...	Uterus=2 oz. A small polypus in cavity of fundus, and a small intra-mural fibroid in posterior wall. Ovaries healthy	General paralysis	
47	A. B. ...	38	Single ...	Mania	3 months	Uterus=2 oz., completely retroverted	Phthisis	
48	S. T. ...	35	Married	General paralysis	... ...	Uterus=2 oz., healthy. Ovaries healthy	General paralysis	
49	A. A. ...	49	Single ...	Melancholia ...	10 months	Uterus=$\frac{3}{4}$ oz., normal. Ovaries: left puckered and contracted; right normal	Phthisis	
50	M. D. ...	39	Married	General paralysis	$1\frac{1}{2}$ years ...	Uterus=2 oz. Cervix short and conical; os small. Ovaries: right contained a recent corpus luteum	General paralysis	
51	M. E. B.	57	Widow...	Melancholia ...	$3\frac{1}{2}$ years ...	Uterus=2 oz. Mucous membrane of fundus injected. A small polypus in cervical canal. Ovaries small	Diarrhœa	
52	A. H. ...	25	Single ...	General paralysis	... ...	Uterus=1 oz. Slight abrasion of os. Right ovary puckered and adherent to surrounding parts by fibrous bands	General paralysis	
53	M. K. ...	47	Single ...	General paralysis	... ...	Uterus=$1\frac{1}{2}$ oz. Lips of cervix enlarged and indurated. Ovaries small	General paralysis	
54	C. W. ...	53	Married	General paralysis	... ...	Uterus=$1\frac{1}{2}$ oz., normal. Ovaries small and puckered ...	General paralysis	
55	A. C. ...	36	Single ...	General paralysis	... ...	Uterus=$1\frac{1}{4}$ oz.; lining membrane of fundus deeply congested. Ovaries: right contained cyst, size of small marble	General paralysis	
56	M. G. ...	75	Single ...	Dementia (senile)	... ...	Uterus=$\frac{3}{4}$ oz., very small. Ovaries very small and puckered	Senile decay	
57	E. J. ...	35	Single ...	General paralysis	$3\frac{1}{2}$ years ...	Uterus=$1\frac{1}{4}$ oz. Cervix conical; os no larger than a small pin's head. Ovaries appeared mixed up with some fibroid thickening of broad ligament, and were not clearly apparent. Both Fallopian tubes obliterated in their course with fibroid thickening; outer two-thirds of left equally distended, forming a sausage-shaped tumour about $\frac{1}{3}$ inch in diameter, bent down alongside of uterus and adherent to it; right, outer third dilated into a somewhat flaccid cyst, size of unshelled walnut, containing clear fluid	General paralysis	
58	S. A. C.	50	Married	Melancholia ...	4 years ...	Uterus greatly enlarged, occupying hypogastric region. The enlargement is due to the development of a number of small fibroid tumours, of varying size, in its walls, which are thus increased to $1\frac{1}{2}$ inches in thickness; a fibroid tumour, size of large orange, springs from summit. Cavity of fundus dilated, containing 2 oz. of thick treacly-looking fluid; cervical canal obliterated. Weight, 49 oz. Right ovary contains a fibroid tumour, size of marble	Chronic Bright's disease	

59	M. P. ...	42	Married	General paralysis	4 years ...	Uterus=2 oz.; a small fibroid tumour in left wall protruding it to left side. Cervix somewhat conical and os small. Ovaries contain a few cysts, from size of marble downwards	General paralysis	
60	M. J. A.	36	Single ...	General paralysis	... ...	Uterus=$1\frac{1}{2}$ oz., retroflected. A few old and firm adhesions in Douglas' pouch. Ovaries abnormally firm	General paralysis	
61	E. R. ...	51	Single ...	Dementia ...	11 years ...	Uterus small; cervical portion almost as large as fundus; os large and patulous. Ovaries small and firm	Disease of knee-joint	
62	M. D. ...	74	Married	Mania	6 years ...	Uterus=$1\frac{1}{2}$ oz., retroflected. Mucous membrane of fundus deeply congested and some blood-stained, glairy fluid hanging from os. Ovaries small and puckered	Senile decay	
63	E. S. ...	36	Married	Dementia (secondary to mania)	5 years ...	Uterus: conical cervix, with small os. Mucous membrane of fundus irregularly ulcerated, and surface covered with a creamy fluid. Ovaries infiltrated with caseous material, which has broken down into a creamy fluid; this was also contained in the folds of the broad ligament, from which, indeed, the ovaries were not very clearly distinguishable	Phthisis	The affection of uterus and ovaries was, no doubt, of tubercular nature
64	C. S. ...	33	Married	Dementia (secondary to mania)	$6\frac{1}{2}$ years ...	Uterus=$1\frac{1}{2}$ oz., retroverted. Slight abrasion at os. Ovaries small, normal	Phthisis	
65	E. P. ...	55	Married	Mania	$5\frac{1}{2}$ years ..	Uterus=2 oz., normal. Ovaries small and puckered ...	Phthisis	
66	A. W. ...	37	Single ...	Dementia (secondary to mania)	$7\frac{1}{2}$ years ..	Uterus=$1\frac{1}{2}$ oz., normal. Ovaries normal	Phthisis	
67	E. B. ...	27	Single ...	Imbecility (with epilepsy)	... ...	Uterus=1 oz.; some abrasion about os. Ovaries healthy	Marasmus	
68	M. E. ...	28	Married	Mania	$7\frac{1}{2}$ years ...	Uterus=$2\frac{1}{4}$ oz., enlarged. Mucous membrane of fundus a little hyperæmic, and some bloody mucus on surface. Ovaries: left contained a recent corpus luteum; a small cyst in broad ligament on right side	Congestion of lungs	
69	J. P. ...	44	Single ..	Mania	6 years ...	Uterus=$2\frac{1}{2}$ oz., contained several fibroids, from size of chestnut downwards. Right ovary contained a cyst, size of marble	Anthrax in neck	
70	E. V. ...	78	Widow...	Mania	$8\frac{3}{4}$ years ...	Uterus enlarged, especially cervical part, which is much hypertrophied and prolapsed; cavity of fundus dilated, and contains some thick reddish fluid. Left ovary contains some broken down caseous material	Tuberculosis of Intestines	
71	M. N. ...	53	Married	Mania	8 years ...	Uterus=$1\frac{1}{2}$ oz.; a polypus, size of pea, projecting from inner wall of cervical canal. Ovaries small and puckered	Phthisis	
72	M. H. ...	53	Single ...	Dementia (organic)	... ...	Uterus very small; fundus bound down to posterior part of pelvic cavity and rectum by numerous old adhesions	Disease of brain and kidneys	
73	M. E. G.	31	Single ...	Imbecility ...	... ...	Uterus=$\frac{1}{2}$ oz., small, with a lateral obliquity to left; os very small. Ovaries small	Marasmus	
74	H. C. ...	28	Single ...	Dementia (secondary to mania)	8 years ...	Uterus=$\frac{3}{4}$ oz., small; normal. Ovaries small	Phthisis	

No.	Initials of Patient.	Age.	Social State.	Form of Mental Disorder.	Duration of ditto.	Condition of Uterus and Appendages.	Cause of Death.	Remarks.
75	M. A. D.	54	Married	Mania	9 years ..	Uterus enlarged. A fibroid tumour, size of fœtal head, attached to fundus; cavity of fundus considerably elongated and dilated. Weight, $29\frac{1}{2}$ oz. A small papilloma attached to edge of external os	Aortic regurgitation	
76	E. T. ...	56	Married	Mania	12 years ...	Uterus=1 oz. A small excrescence, size of pea, in upper part of fundus. Ovaries normal	Phthisis	
77	S. K. ...	40	Single ...	Melancholia ...	10 years ...	Uterus=$\frac{3}{4}$ oz., small; retroverted. Conical cervix; small os. Ovaries small	Knee-joint disease	
78	E. B. ...	79	Widow...	Dementia ...	... ...	Uterus=$2\frac{1}{2}$ oz., completely retroverted; cavity of fundus a little dilated; mucous membrane injected	Senile decay	
79	M. C. ...	50	Married	Melancholia ...	10 years ...	Uterus=$1\frac{1}{2}$ oz. A fibroid, size of small bean, projecting from posterior wall, and one from top of fundus	Phthisis	
80	B. O'B....	49	Single ..	Dementia (secondary to mania)	11 years ...	Uterus=$1\frac{3}{4}$ oz., retroflected. Ovaries puckered	Phthisis	
81	M. G. ...	45	Married	Melancholia ...	7 years ...	Uterus normal. Ovaries normal	Phthisis	
82	E. T. ...	61	Single ...	Melancholia ...	8 years ...	Uterus=2 oz.; lining membrane of fundus deeply ecchymosed, almost black. Ovaries small	Phthisis	
83	B. D. ...	37	Married	Melancholia ...	10 years ...	Uterus=2 oz., normal. Ovaries normal	Phthisis	
84	B. M. ...	50	Married	Dementia (secondary to mania)	... ...	Uterus=3 oz., enlarged; os patulous; mucous membrane of fundus injected. Right ovary contains a small cyst	Phthisis	
85	E. E. ...	52	Married	Mania	12 years ...	Uterus=$1\frac{3}{4}$ oz.; fundus somewhat enlarged, and contains an intra-mural fibroid, size of small walnut. Ovaries very small	Phthisis	
86	A. P. ...	34	Single ...	Mania	12 years ...	Uterus=$1\frac{1}{2}$ oz.; developed slightly unsymmetrically towards right side. Ovaries normal. A cyst, size of small bean, in left side of broad ligament	Apoplectiform cerebral congestion	
87	S. J. ...	38	Single ...	Imbecility (with epilepsy)	... ...	Uterus=$2\frac{1}{2}$ oz., enlarged; os no bigger than a small pin's head. Ovaries normal	Epilepsy	
88	E. R. ..	61	Single ...	Melancholia ...	11 years ...	Uterus=$1\frac{1}{2}$ oz.; slight induration of cervix. Ovaries small	Strangulated femoral hernia	
89	M. B. ...	33	Single ..	Dementia (secondary to mania)	14 years ...	Uterus=$1\frac{1}{2}$ oz. Conical cervix; pin-hole os. Ovaries: left converted into a cyst, size of small orange; a small cyst in right	Myelitis (secondary to caries of vertebræ)	
90	E. K. ...	36	Single ...	Dementia (secondary to mania)	11 years ..	Uterus=$1\frac{1}{2}$ oz., retroflected; fundus fixed to rectum by several firm fibrous bands. Ovaries normal	Phthisis	
91	T. D. ...	42	Married	Dementia (secondary to mania)	14 years ...	Uterus=$2\frac{1}{2}$ oz., healthy. Ovaries healthy...	Aortic regurgitation	
92	J. T. ...	52	Single ...	Dementia ...	17 years ...	Uterus=$1\frac{1}{2}$ oz., small. Cervix somewhat conical; small os. Ovaries small and puckered	Mitral and aortic disease	

93	E. W. ...	56	Married	Mania	18 years ...	Uterus= $4\frac{1}{2}$ oz., enlarged; a fibroid, weighing $6\frac{3}{4}$ oz., attached to fundus by a long peduncle. A polypus, size of bean, attached to internal wall of cervix. Ovaries somewhat fibrous; a small cyst in left	Pericarditis
94	A. S. ...	43	Single ...	Dementia (secondary to mania)	23 years ...	Uterus=1 oz., normal. Ovaries normal	Phthisis
95	M. S. ...	68	Widow ...	Dementia (secondary to mania)	23 years ...	Uterus= $\frac{3}{4}$ oz., small; a little puriform fluid in cavity of fundus. Ovaries small and puckered	Senile decay
96	M. M. ...	67	Married	Mania	28 years ...	Uterus=1 oz.; a fibroid contraction just above internal os. Ovaries puckered	Marasmus
97	J. T. ...	66	Single ...	Mania	27 years ...	Uterus= $1\frac{1}{2}$ oz.; mucous membrane of upper part of fundus injected, and thick puriform secretion smeared over it. Ovaries small	Strangulated femoral hernia
98	M. A. R.	52	Married	Dementia (with epilepsy)	23 years ...	Uterus=1 oz., healthy. Ovaries small and puckered ...	Granular contracted kidneys
99	M. A. D.	67	Widow...	Mania (with epilepsy)	27 years ...	Uterus= $1\frac{1}{2}$ oz., normal. Ovaries and Fallopian tubes converted into cysts, that connected with left ovary being size of orange; the left Fallopian tube thickened and dilated into a hollow cylinder, size of man's middle finger. Right ovary and Fallopian tube in similar condition, but less marked	Epilepsy
100	B. S. ...	55	Married	Mania	25 years ...	Uterus= $1\frac{1}{2}$ oz.; cervix slightly contracted, and fundus slightly dilated, containing a little reddish fluid	Cancer of pylorus
101	E. W. ...	57	Single ...	Mania	27 years ...	Uterus=1 oz. Mucous membrane of cavity of fundus somewhat irregular, the glands being enlarged and hyperæmic. Ovaries small and puckered	Phthisis
102	L. B. ...	43	Single ...	Imbecility ...	... ...	Uterus=2 oz., somewhat enlarged; retroflected. Ovaries healthy	Myxo-lipomatous tumour of abdomen
103	M. C. ...	68	Married	Mania	28 years ...	Uterus=1 oz., healthy. Ovaries small and puckered ...	Cancer of stomach
104	J. L. ...	57	Single ...	Mania	32 years ...	Uterus very small. Ovaries small and puckered ...	Cirrhosis of lungs
105	H. C. ...	45	Married	General paralysis	4 years ...	Uterus= $2\frac{3}{4}$ oz., enlarged. Two small fibroids in fundus. Right ovary contains a small cyst	General paralysis
106	D. S. ...	56	Married	Melancholia ...	3 weeks ...	Uterus=2 oz., normal. Ovaries small, normal	Exhaustion from melancholia
107	E. H. ...	38	Single ...	Mania	14 years ...	Uterus, a small pedunculated fibroid springing from posterior wall. Both Fallopian tubes dilated, tortuous, and distended with fluid; left the more so, and the extremity of this is united with a multilocular cyst of the left ovary, which forms a tumour, size of small orange. Right ovary normal. Uterus, with appendages, weighs 9 oz.	Mitral stenosis
108	E. P. ...	65	Married	Melancholia ...	6 years ...	Uterus= $2\frac{3}{4}$ oz. Mucous membrane of fundus ecchymosed, and cavity contains a small fibrinous clot. Ovaries small and puckered	Mitral stenosis, etc.
109	A. S. ...	41	Married	Dementia (secondary to mania)	14 years ...	Uterus=2 oz., normal. Ovaries normal	Phthisis

Table II.—Showing the Condition of the Uterus and its Appendages in 65 Insane Individuals, as Ascertained by Examination during Life.

** In this, and all cases where no special mention is made of the condition of the ovaries, no abnormality of these parts was detected.*

No.	Initials of Patient.	Age.	Social State.	Form of Mental Disorder.	Duration of ditto.	Condition of Uterus and Appendages.	Remarks.
1	E. S. ...	36	Married	Monomania ...	$2\frac{1}{2}$ years ...	Uterus enlarged, measuring $3\frac{1}{2}$ inches, with a slight tendency to retroflexion, somewhat low in pelvis. Slight erosion of lips of os *	Marked delusions as to sexual intercourse. Multipara
2	E. B. ...	44	Married	Mania	6 weeks ...	Uterus small. Cervix conical with very small os (this would not admit sound)	Nullipara
3	C. H. ...	43	Married	Mania	9 years ...	Uterus: fundus normal size, but cervix appears somewhat hypertrophied; os very small	Erotic tendencies very marked at times
4	M. J. L.	50	Married	Melancholia ...	$6\frac{1}{2}$ years ...	Uterus measures $3\frac{1}{2}$ inches; fundus enlarged, being swelled out by a fibroid tumour, about the size of an unshelled walnut; anterior lip of os hypertrophied; edges of os for some distance round, red, granular-looking, and shorn of epithelium, bleeding on the slightest touch	Delusions as to being tortured by the introduction of instruments into her womb, etc. Multipara
5	E. W. ...	51	Married	Melancholia ...	8 months...	Uterus in normal position and of normal size and depth—$2\frac{1}{2}$ inches. Lips of os normal	Multipara
6	E. McC.	29	Married	Mania (puerperal)	$5\frac{1}{2}$ years ...	Uterus moderately retroflected; normal depth; slight erosion of lips of os	Primipara
7	E. P. ...	30	Married	Mania	3 weeks ...	Uterus, normal position—$2\frac{7}{12}$ inches in depth; slight erosion of lips of os	Multipara
8	E. E. ...	38	Married	Monomania ...	6 months	Uterus slightly retroflected, and also somewhat bent to left side; normal depth; slight induration of lips of os, with slight abrasion of epithelium	Multipara
9	F. E. ...	25	Married	Acute dementia	5 months	Uterus completely anteflected; of normal size and depth. Ovaries somewhat low in pelvis	Primipara
10	E. C. ...	35	Married	Mania	2 weeks ...	Uterus somewhat prolapsed, but not flexed; normal depth; cervix conical, but os not contracted. Ovaries normal	Nullipara
11	E. R. ...	32	Single ...	Dementia (with epilepsy)	... ...	Uterus very small, apparently not more than $1\frac{1}{2}$ inches in depth; cervix somewhat conical; no os externum can be detected	Nullipara. A prostitute
12	E. L. ...	41	Widow...	Mania	7 weeks ...	Uterus normal. Ovaries normal	Multipara
13	M. McD.	50	Married	Mania	11 years ...	Uterus in normal position and of normal size and depth; very slight erosion of lips of os	Multipara
14	E. C. ...	37	Married	General paralysis	$2\frac{1}{2}$ years ..	Uterus, normal position and size; moderate erosion of lips of os... ...	
15	E. D. ...	37	Married	Dementia (secondary to mania)	$6\frac{1}{2}$ years ...	Uterus completely anteflected, $2\frac{3}{4}$ inches in depth; cervix distinctly indurated, and somewhat hypertrophied; considerable ulceration of lips of os. Much ropy puriform secretion hanging from os	
16	S. M. ...	52	Married	Mania	18 years ...	Uterus completely retroflected, but of normal size and depth	Delusions as to sexual intercourse, etc. Multipara
17	M. T. ...	59	Widow...	Dementia (organic)	$8\frac{1}{2}$ months	Uterus normal	Multipara
18	E. B. ...	31	Widow...	Melancholia (with epilepsy)	... ...	Uterus somewhat retroflected; lips of os a little thickened, and red and granular-looking for some distance around orifice. A small polypoid tumour, size of split pea, hanging from edge of os	Multipara

19	C. D. ...	52	Married	Dementia (with epilepsy)	... ...	Uterus, normal size; slight inclination towards right side, otherwise normal	
20	E. L. ...	36	Married	Mania	5 years ...	Uterus, normal position; 3 inches in depth, otherwise normal	Multipara. Has frequently displayed erotic tendencies
21	E. D. ...	49	Married	Mania	13 years ...	Uterus slightly anteflected, otherwise normal...	
22	E. S. ...	33	Married	Melancholia ...	$15\frac{1}{2}$ months	Uterus, normal size; slightly retroflected; slight erosion of lips of os...	Multipara
23	M. J. M.	34	Married	Melancholia ...	21 months	Uterus, normal size; anteflected; slight erosion of lips of os	Multipara
24	M. A. ...	45	Married	General paralysis	1 year ...	Uterus slightly anteflected; a little below normal depth—$2\frac{1}{4}$ inches; trifling erosion of lips of os	Multipara
25	P. P. ...	42	Married	Mania	1 year ...	Uterus slightly retroflected; of normal depth; trifling erosion of lips of os	Multipara
26	E. N. ...	36	Married	Mania	10 days ...	Uterus a little prolapsed, and slightly deflected towards left side; lips of os a little swollen, with moderate abrasion of epithelium	Multipara. Said to have been under treatment for uterine disease, for some months prior to admission
27	M. K. ...	27	Married	Melancholia ...	20 months	Uterus somewhat anteflected; of normal depth; moderate erosion of lips of os. Left ovary distinctly swollen	Multipara. Menstruated a few days ago
28	E. H. ...	22	Married	Mania	18 days ...	Uterus perfectly normal	Primipara
29	C. R. ...	29	Married	Mania (puerperal)	$2\frac{1}{4}$ years ...	Uterus, normal position and depth; two minute follicular tumours on lips of os	Multipara
30	L. S. ...	35	Married	Melancholia ...	3 years ...	Uterus, normal position and depth ($2\frac{1}{2}$ in.); considerable erosion of lips of os, the surface for about half an inch all round orifice being red and raw-looking	
31	M. S. ...	39	Widow...	Mania (with epilepsy—7 years)	3 weeks ...	Uterus somewhat deflected to left, with deficient mobility in this situation; otherwise normal	Multipara
32	S. D. ...	56	Married	General paralysis	... ...	Uterus, normal position; slightly below normal depth—$2\frac{1}{4}$ inches; trifling erosion of posterior lip of os	Multipara
33	M. D. ...	34	Married	Mania (delusional)	1 year ...	Uterus: a fibroid tumour, size of large orange, springing from fundus, and nearly filling pelvis; developed more anteriorly than posteriorly; cervix free. Trifling erosion of lips of os	Multipara. Menstruation somewhat profuse
34	M. R. ...	47	Married	Melancholia ...	3 months	Uterus moderately anteflected; otherwise normal	Multipara
35	A. C. ...	36	Married	Melancholia (puerperal)	5 weeks ...	Uterus, normal position and depth. Considerable erosion of lips of os, there being a raw-looking surface for about $\frac{1}{3}$ inch all round orifice	Multipara
36	M. B. ...	47	Married	Dementia (secondary to mania)	$5\frac{1}{2}$ years ...	Uterus slightly anteflected and a little diminished in depth, measuring $2\frac{1}{4}$ inches; posterior lip of os indurated, and on surface is a small flattish excrescence; a polypoid tumour, size of pea, hanging from edge of os	
37	A. S. ...	44	Single ...	Melancholia ...	3 months	Uterus appears a little small, but measures $2\frac{1}{2}$ inches in depth; normal	Primipara
38	E. T. ...	25	Single ...	General paralysis	... ...	Uterus anteflected, but otherwise normal. Left ovary a little enlarged	A prostitute. Recently menstruated, and then had delusions that she was in labour
39	E. S. ...	32	Married	Mania	10 months	Uterus slightly retroflected and a little low in pelvis; trifling erosion of lips of os. Right ovary prolapsed and distinctly swollen	Multipara
40	M. C. ...	38	Single ...	General paralysis	... ...	Uterus slightly retroflected, $2\frac{7}{12}$ inches in depth; otherwise normal	Primipara
41	C. McC.	42	Married	Mania	7 weeks ...	Uterus, normal position, $2\frac{5}{12}$ inches in depth; trifling erosion of posterior lip of os	Multipara.
42	E. M. ...	30	Married	Melancholia ...	2 years ...	Uterus slightly anteflected, $2\frac{5}{8}$ inches in depth; considerable erosion of lips of os	Multipara

No.	Initials of Patient.	Age.	Social State.	Form of Mental Disorder.	Duration of ditto.	Condition of Uterus and Appendages.	Remarks.
43	M. J. ...	33	Married	Melancholia ...	3 weeks ...	Uterus anteflected, $2\frac{5}{12}$ inches in depth; considerable erosion of lips of os. Ovaries: both prolapsed in Douglas' pouch	Multipara
44	E. D. ...	29	Married	Mania (delusional)	9 weeks ...	Uterus strongly anteflected; cervix conical; os very small (would not admit sound). Ovaries normal	Nullipara
45	M. E. B.	35	Married	Dementia ...	2 years ...	Uterus normal. Ovaries normal	Multipara
46	A. R. ...	40	Married	General paralysis	$2\frac{1}{4}$ years ...	Uterus strongly anteflected and somewhat anteverted as well, the os being tilted a little backwards, and the fundus lying a little to the left; otherwise normal	Multipara. Delusions as to being in labour, whilst menstruating
47	M. A. W.	30	Married	Melancholia ...	4 years ...	Uterus slightly anteflected; normal size and depth; trifling erosion of lips of os	Multipara
48	S. W. ...	38	Married	Melancholia ...	9 years ...	Uterus, normal position and depth; considerable erosion of lips of os. Left ovary somewhat swollen	Multipara
49	A. H. ...	32	Single ...	Melancholia ...	$2\frac{1}{2}$ months	Uterus somewhat low in pelvis, but otherwise normal	Masturbates excessively. Nullipara
50	A. B. ...	37	Married	Mania (delusional)	4 months	Uterus, normal position; fundus appears a trifle large; sound passes $2\frac{3}{4}$ inches; trifling erosion of lips of os	Multipara
51	M. B. ...	44	Married	Mania	8 years ...	Uterus, normal position, $2\frac{3}{4}$ inches in depth; trifling erosion of lips of os	Multipara
52	A. B. ...	29	Single ...	Mania	$1\frac{1}{2}$ years ...	Uterus normal	Masturbates excessively
53	M. D. ...	33	Married	Mania	2 years ...	Uterus perfectly normal. Ovaries normal	Multipara
54	E. C. ...	34	Married	Mania	9 years ...	Uterus completely retroflected, but quite movable, and reduction readily effected by means of sound; $2\frac{7}{12}$ inches in depth; otherwise normal. Ovaries normal	
55	M. G. ...	54	Married	Dementia ...	2 years ...	Uterus rather small, but of normal depth; considerable erosion of posterior lip of os	Multipara
56	E. D. ...	24	Married	Dementia (secondary to puerperal mania)	5 years ...	Uterus retroflected; moderate erosion of posterior lip of os. Ovaries normal	Multipara
57	E. S. ...	32	Married	Mania (delusional)	3 years ...	Uterus retroflected, but of normal size and depth; considerable erosion of lips of os. Ovaries normal	
58	A. D. ...	24	Single ...	Dementia ...	... ...	Uterus slightly anteflected; $2\frac{1}{4}$ inches in depth; a little erosion of lips of os. Right ovary about size of pigeon's egg	A prostitute
59	A. S. ...	40	Single ...	Mania	$2\frac{1}{2}$ years ...	Uterus, normal position; $2\frac{3}{4}$ inches in depth; os patulous, and a little erosion of lips. Ovaries normal	
60	E. B. ...	43	Widow...	Mania	6 years ...	Uterus very small; not more than half normal size; in normal position; slight erosion of lips of os	
61	E. C. ...	42	Married	Mania	10 years ...	Uterus prolapsed; cervix protruding from vulva; lips hypertrophied; depth $3\frac{1}{2}$ inches. Ovaries normal	
62	E. D. ...	23	Married	Melancholia ...	6 weeks ...	Uterus normal	Primipara
63	H. G. ...	40	Married	Melancholia ...	6 months	Uterus anteflected; normal size; considerable erosion of anterior lip of os	Multipara
64	E. G. D.	25	Married	Melancholia ...	3 weeks ...	Uterus anteflected; normal size and depth	
65	H. C. ...	25	Married	Melancholia ...	3 months	Uterus anteflected; normal depth; moderate erosion of lips of os. Ovaries normal	

Conclusion.—From the study of these cases, the general conclusion which appears capable of being drawn, is, that uterine abnormalities are of more frequent occurrence amongst the insane, than is commonly supposed. Though I am unable to bring forward any cases in which the recognition and treatment of uterine disease has been followed by the cure of the patient's insanity, this is perhaps hardly to be wondered at, since the investigation has embraced a much fewer number of recent cases of insanity than I could have wished, and it is sufficiently obvious that it is only to recent cases, that we can look for results of this nature. Many of the cases, however, given in the tables, and commented on in the text, are, I think, very suggestive. I cannot but think it very probable that instances must occasionally occur in which the non-recognition of uterine disease must result in a case at one time curable, eventually passing beyond this category, to assist in swelling the large total of permanent asylum-residents. The only way in which this danger may be guarded against, is by the more frequent resort to uterine examinations on the patient's admission, and I would venture to suggest that if greater attention were paid to this subject in asylums than is, I think, now generally the case, results of practical value might be expected to accrue.

Some Relations of Delirium Tremens to Insanity. By

Geo. H. Savage, M.D.

(*Paper read at the Quarterly Meeting of the Medico-Psychological Association, held at Bethlem Hospital Nov.* 5, 1884.)

At the last moment I have been asked to fill up a gap in the programme of to-day, and if my paper be short and uninteresting, I must crave your indulgence.

The most interesting territories are either those which are quite untracked, or those which may be called historic, from the frequency with which they have proved battle-grounds on which fights for great objects have taken place.

I cannot claim any interest for delirium tremens as an untracked morbid territory, but I think it deserves further notice, and must continue to arrest attention from its importance as a boundary-land, where insanity exists on one side and marked physical disease is met with on the other. There are several most important points upon which I should like to hear the expressed opinion of this meeting:—

1st. Is delirium tremens more common among persons of a neurotic type than among the ordinary run of people?

A similar question has been asked, but not fully and satisfactorily answered, as to the frequency and the degree of delirium met with in fevers—whether, in fact, a patient with insane inheritance or with a misshapen head is more likely to be wildly delirious than those with no physical or mental defect?

The question requires very careful consideration, and cannot be answered from the experience of any one man.

Our experience necessarily brings us most in contact with the illness of insane people and of their near relations; therefore, for the complete answer to this question, we must seek help from the general physician. To conclude the first part of this discussion we must admit that delirium tremens is at least a common affection with neurotic persons, and next we must consider in detail the other points.

2nd. Does a neurotic tendency affect delirium tremens either in its form, its duration, or its results?

Recent experience leads me to think that nervous inheritance has a distinct effect, first of all on the *causation of delirium tremens,* so that a smaller amount of alcoholic stimulant or stimulant of a weaker kind will cause delirium tremens in the neurotic than in others.

This is, I believe, true for many of those who come of nervous stock, but it is true also of those who are neurotic from other causes.

Very few cases of delirium tremens arise from drink unaccompanied by some nervous shock or cause of nervous depression. The surgeon is used to cases following injuries, and the gaol-surgeon is used to cases following nervous shock resulting from detection in crime.

I have met with several cases in which social trouble has produced the nervous depression which was sufficient to start the morbid process.

Besides this very general nervous depression which may lead to delirium tremens we often meet with cases in whom a blow on the head has predisposed to nervous instability, so that very little stimulant will make a man "mad drunk." In some of these cases a very little drink either sets up a craving for drink or so removes the power of self-control that drunkenness is indulged in, which soon develops delirium tremens or some other form of mental disorder.

In general paralysis of the insane we sometimes meet with

cases very easily disturbed by stimulants, the tottering nervous structure being easily upset. In such cases the repetition of indulgence in alcohol may set up delirium tremens or a state of delirium which may mark the early symptoms of the decay. It is noteworthy that general paralytics will rarely tolerate the same dose of powerful remedies, such as hyoscyamine or chloral, as will other patients suffering from mental excitement apart from general paralysis.

To sum up this part of my subject, then, I would say in my experience, delirium tremens or an allied state of mental disorder is more readily produced in the neurotic by inheritance, in the nervous from injury or from decay, than in less unstable people. In the specially neurotic persons referred to above alcohol may produce insanity in several distinct ways, but at present I intend to allude only to the cases which develop delirium tremens first.

In these a bout of drinking may be followed by some moral shock, such as loss of reputation, loss of situation, or loss of fortune; and this may produce very brief depression, which may be followed by the acute symptoms of delirium tremens.

The attack of delirium tremens may either run its ordinary course or it may rapidly change in character. In either case in the individuals under consideration the ordinary "horrors" pass off, and are replaced by boisterous mania or simple melancholia. The mania is generally of a very acute type. The patients are boastful and benevolent, and in very many particulars resemble general paralytics in the early stages of the disorder.

The appetite is often very good, and the patient says he feels himself quite another man.

Acute mania of the type described may last for a few weeks, to be then slowly replaced by perfect sanity, or the mania may for several months be present as general incoherence.

The real danger arises from misunderstanding the nature of these symptoms, and allowing the excitement to go on till the patients sink rapidly from exhaustion.

In some such cases food is obstinately refused, the tongue becomes dry and brown, the bowels are confined, and the bodily temperature rises.

If very energetic measures in the way of constant forced feeding are not followed, death will result. In cases in which the mania appears to be becoming chronic repeated blistering of the scalp is useful.

After delirium tremens there may be exaggeration of the

natural depression following the great mental excitement. This may be associated with both suicidal and homicidal symptoms. Those cases having delusions of poisoning or of conspiracies, require very careful supervision and treatment, and should, if possible, be kept some months under observation.

Repeated attacks of delirium tremens may gradually produce mental instability, which may pass into delusional insanity. I have seen several cases in which neurotic patients have had acute attacks of delirium tremens of the ordinary type. Later attacks of delirium tremens have been followed by slight mental perversion, which has rapidly passed off, but as age increased and the attacks of delirium tremens recurred the mental disorder became more pronounced, so that these persons had to be secluded in asylums.

In one case a third seclusion proved to be the last, as the patient never recovered from his insanity, which was characterised by hallucination of all his senses, with ideas of persecution and of poison.

To sum up, the result of my experience among neurotic subjects is that partial weak-mindedness may follow on an attack of delirium tremens, and this, too, is most commonly well marked if insanity exist in the family.

Delirium tremens in neurotic patients may be but the first symptom of nervous disorder which may assume either of the forms common in ordinary insanity, the delirium being the active cause or "motor" in producing the disorder.

Repeated attacks of delirium tremens, especially in those of nervous inheritance, tend to create chronic forms of insanity.

Each attack makes the person less stable, and causes instability to be most marked along certain lines. Thus I have seen neurotic patients suffering from ordinary delirium tremens. These, later, have had delirium tremens followed by certain prolongations of the disorder, which were got rid of on several occasions, but on still more recurrences of delirium tremens the tail of the disorder remained as a permanent mental appendage.

On Alcohol in Asylums, chiefly as a Beverage. By D. Hack Tuke, F.R.C.P.

(Paper read at the Psychological Section of the British Medical Association, held at Belfast, July, 1884.)

My object in this paper is to elicit the opinions of asylum superintendents in regard to the use of some form of alcohol in the ordinary dietary of institutions for the insane, and to state at the same time what I already know in respect to this question, thanks to the very general replies I have received from medical superintendents to a troublesome circular which I recently issued. It was not without much hesitation that I sent round these queries, well aware as I am of the multitudinous duties already devolving upon the heads of asylums; but the importance of the subject induced me to overcome this reluctance, and I take the earliest opportunity of expressing my appreciation of the kindness of those gentlemen who have taken the trouble to fill up the circular. As to those who have not done so, I readily take the will for the deed.

That this subject is, as I have said, an important one, I suppose no one, whatever opinion he may hold about it, will for a moment deny. It is of importance to the patients on the one hand, and as respects pauper asylums, may be so to the ratepayers on the other. I hasten to say, however, that the decision arrived at as to asylum diet must be determined by what is really the best for the administration of the asylum and the good of the patients, physically, mentally, and morally, and not by what is most economical from the ratepayer's point of view; although, of course, I do not deny that if what is best for the order of the house or the health of the inmates is also the best financially, added force is given to the conclusion.*

I issued the subjoined circular to the County and Borough Asylums and to the Registered Hospitals of Great Britain and Ireland. These are 129 in number, 80 in England and Wales, 26 in Scotland, and 23 in Ireland. The replies amounted to 100, namely, 66 in England and Wales, 18 in Scotland, and 16

* An indication of the practical importance of the question is afforded by a letter received from a medical superintendent, in which he writes :—"Public opinion in the county is pressing me to make a change, but I cannot yet make up my mind on the question, and am awaiting with interest the result of your debate."

in Ireland. The total number of patients in these asylums is 53,855 :—

1. Average number of Patients resident during last year (1883).
2. Persons having their Meals in Asylum in addition to Patients.
3. Do you give Beer or any Alcoholic other than medicinally? and if so, what is the allowance?
4. If not, do you give any substitute?
5. What was the average weekly cost, per Patient, in 1883, for supplying Alcoholics (including cost of Brewery, when Beer is brewed in Asylum)?
6. What was the expenditure during the above year, in (1) Beer, (2) Porter and (3) Wine or Spirits, respectively.
7. Are your Attendants and Servants allowed Beer?
8. If not, what, if any, substitute or equivalent do you give?
9. If Beer and other Alcoholics have been disused as a beverage in your Asylum, will you briefly state your views as to the result upon the health of the Patients and the discipline of the Wards?

Of the 100 asylums, the superintendents report in 50 instances that alcohol is not used for patients in any form or for any use except as a medicine.

I proceed to enumerate them.

England and Wales.

Birmingham Borough Asylum, Winson Green.
Ditto, ditto Rubery Hill.
Bristol Borough Asylum.
Cornwall County Asylum.
Cumberland and Westmoreland County Asylum.
Carmarthen County Asylum.
Derby County Asylum.
Durham County Asylum.
Denbigh, Anglesea, Carnarvon, Flint and Merioneth.
Devon County Asylum.
Glamorgan County Asylum.
Hull Borough Asylum.
Hereford County and City Asylum.
Ipswich Borough Asylum.
Kent County Asylum, Barming Heath.
Lancashire County Asylum, Lancaster.
Monmouth, Brecon, and Radnor County Asylum.
Northumberland County Asylum.
Somerset County Asylum.
Surrey County Asylum, Cane Hill.
Yorkshire West Riding County Asylum, Wakefield.
Ditto ditto ditto Wadsley.

Note.—At the York Retreat stimulants are not provided. They are, however, used and charged to the account of the patients requiring them.

Scotland.

Argyll District Asylum.
Ayr District Asylum.
Dumfries Asylum, Pauper Department.
Fife and Kinross District Asylum.
Glasgow. District Asylum, Bothwell.
Ditto Barony Asylum, Woodilee.
Ditto City Asylum.
Ditto Govan Asylum.
Greenock Asylum.
Mid Lothian District Asylum.
Paisley Asylum.
Perth District Asylum.
Roxburgh District Asylum.

Ireland.

Belfast District Asylum.
Ballinasloe.
Castlebar.
Clonmel.
Carlow.
Down.
Dundrum Criminal Asylum.
Ennis.
Enniscorthy.
Killarney.
Londonderry.
Limerick.
Omagh.
Sligo.
Waterford.

Before I state the opinions of the superintendents of those asylums in which alcoholics have been discontinued, I must cite the opinions of those who continue their use and decidedly object to make a change. The number, out of the 50 superintendents of alcohol-using asylums, who express their opinion is unfortunately very few, but they are none the less worthy of respectful consideration.

1.—Mr. Symes, the medical superintendent of the Dorset Asylum, says :—"All the beer given to those who are not ill never causes any excitement or breach of discipline. Just as with tobacco, many persons like it. Should patients have such a trifling luxury withheld ?"

2.—Mr. Rooke Ley, who, although he has discontinued the use of beer in the recently-added annexe where the bulk of the epileptics are located, allows its use in the asylum generally, thus writes:—"Of course patients will get on without beer as they would do without tobacco or snuff, but that, in my opinion, is no reason for depriving them of these little luxuries. Patients do not find an asylum a pleasant place to live in, and it will not add to their contentment to cut off their beer and tobacco. I should like to hear from some superintendent who indulges in beer or wine himself what harm he thinks the asylum beer will do his patients."

3.—Dr. Jepson, of the London City Asylum at Stone, observes:—"I am strongly opposed to the plan of enforcing teetotalism, but I am always willing to consider the feelings of those who are abstainers."

4.—I ought in this place to quote the testimony of Dr. Harris, the superintendent of the Norwich Borough Asylum, where beer is allowed. He is to be congratulated for being able to speak in these glowing terms of the state of his asylum:—"Tranquillity," he says, "invariably reigns in the wards, and the discipline is considered good. I have not seen any patient excited in this asylum from alcohol, and should be sorry to see the beer allowance cut off. This simply shows that beer does not excite any patients as allowed here."

This is certainly a very modest deduction.

5.—In similar terms writes Dr. Tate, of the Nottingham Lunatic Hospital, where there are 76 patients:—"During the 25 years I have been superintendent of this asylum I have never observed any ill-effect either amongst patients or servants from drinking the beer allowed to them, viz., two pints daily for males, one pint for females, for both patients and attendants."

6.—Dr. Wild, superintendent of the Netley Lunatic Asylum, writes:—"The giving of beer, &c., rests entirely with myself, and my opinion is that a pint of moderate beer or porter taken with the food is, as a rule, decidedly beneficial. I may say that I rarely use any other form of alcohol, and as such allow it in every case unless there are special reasons against it."

7.—Dr. Spence, superintendent of the Stafford Asylum, writes:—"Happily I am supported strongly by my Committee in adhering to the good old plan of giving the patients one of their very few pleasures, a glass of beer." Dr. Spence, however, does not give beer to "the imbeciles and the grosser epileptics."

8.—One superintendent expresses himself strongly in favour of giving beer, but is one of those who feel themselves placed in a difficult position. On the one hand they feel a strong repugnance to introduce any sweeping rule into the diet allowance which appears unsocial and opposed to an Englishman's notion of good cheer, while on the other hand they are disturbed by the abuse of the privilege in the form of patients becoming intoxicated from obtaining much more than their allowance of beer. This superintendent, warmly opposed as he is to the discontinuance of beer in the asylum, observes that after one of these unpleasant occurrences he exclaims, "I wish to goodness there was no beer at all in the house." In cooler moments, however, he cannot bring his mind to favour the deprival of the patients of what he contends has the effect of making the asylum population happier for a few hours every day than they otherwise would be.*

Returning now to the superintendents of asylums in which alcoholics have been discontinued, I find it convenient to divide them into three classes:—

I.—Those who have found the disallowance of stimulants (except as a medicine) to be injurious.

II.—Those who have not observed any effect, whether favourable or unfavourable.

III.—Those who regard the experiment as successful.

I will cite all that has been communicated to me under the first and second heads. The returns under the third head are the most copious, and I am afraid time will not admit of my reading them all.

I.

The returns from superintendents who have found the disallowance of stimulants (except for medical treatment) to be injurious.

Under this head I have to give the observations made by Dr. Ashe, of the Dundrum Criminal Asylum.

"Beer," he says, "was formerly used as an extra for working patients. A severe deterioration took place in the health of the inmates just about the time when it was disused, but though at first inclined to attribute it to the withdrawal of the

* The steward of an asylum where alcoholics are used thus expresses himself:—"If there is beer in the way it goes I can't tell you how. Men will take it as they breathe the air. The great difficulty is to keep a hand on the beer barrel. It is extraordinary what dodges and schemes there are to get at the beer barrel." He does not, however, approve of the practice of disallowing beer altogether.

mild stimulant tonic, I afterwards thought that other circumstances had at least as much to do with it. The deterioration consisted in a tendency to develop phthisis, which proved fatal in several cases, the house up to that time having been remarkably free from such diseases."

The only other superintendent I can quote under this head is Dr. Claye Shaw, of the Middlesex Asylum. Dr. Shaw's experience, however, does not touch the question whether discontinuance of beer is injurious. He simply failed in his attempt to make a change. He writes:—"We tried the discontinuance of beer in one of the wards on each side for a few days, but we very nearly had a riot in consequence."

II.

The returns from Superintendents who have not observed any effect, whether favourable or unfavourable.

1.—Under this head I refer to an asylum in which the experiment has been partially tried, namely, the Leicester Borough Asylum, where, out of 457 patients, only 79 patients have beer, and these only half a pint. The rest have tea or coffee. The superintendent, Dr. Finch, observes:—"The change in the dietary has had no perceptible effect upon the health of the patients." He adds that "it has occasioned scarcely any complaint among the patients."

2.—I would refer here also to the Northampton County Asylum, inasmuch as although beer is given to workers* as a reward, it forms no part of the ordinary diet. Dr. Greene reports:—"Some years since the beer was discontinued to the non-workers without any appreciable effect."

3.—Again, at the Northumberland County Asylum, where beer has been partially allowed and is about to be wholly discontinued, Dr. McDowell states that "In 1876 beer was removed from the dietary of some patients as an experiment. The result was absolutely negative in every respect. Its use was further limited in 1879; result the same. Next month it will be discontinued altogether."

* The number in the list of non-alcoholic asylums would have been larger, had I not excluded those in which beer is given to workers. Returns have also come to hand since this paper was written, reporting the non-use of alcohol in the Armagh, Maryborough, and Haddington Asylums.

As is well-known Dr. Strange, of the Salop Asylum, holds strong views against disallowing beer in asylums. He, however, says "I see no reason for giving beer to a lot of idle imbeciles and dements." It is "only given to *real working* patients and by medical order."

4.—At the Worcester Asylum, where a partial trial has been made, Dr. Cooke writes :—" Not the slightest alteration either as to improvement or deterioration in the health of the patients or discipline of the wards has occurred in those wards where alcohol as a beverage has been disused."

5.—Dr. Mitchell writes from the West Riding Asylum, Wadsley :—" I have not noticed any difference either in the health of the patients generally or in the discipline of the wards since beer was discontinued as an article of diet. The beer formerly given was of too weak alcoholic strength to have any effect in any way upon the patients, unless it may have had a slight mild diuretic effect upon the more feeble of them."

6.—Dr. Skae, the superintendent of the Ayr Asylum, writes : —" I have found no appreciable result upon the health of the patients or the discipline of the wards since beer was disused as a beverage. The quantity which was at any time allowed was so small, and the quality of the beer so feeble, that its withdrawal was apparently never felt."

7.—Dr. Cameron, of the Mid Lothian Asylum, writes :—" I believe no appreciable change can be discovered either in discipline or in health that can be fairly attributed either to the moderate use or the disuse of beer or porter, but I do not favour the system of giving stimulants to attendants, at least in this county, where whisky is the popular drink."

8.—Dr. Urquhart, of the Murray Royal Asylum, Perth, says : —" I have served in teetotal and beer-drinking asylums, and do not believe that this question has any appreciable influence on the state of the patients as regards discipline. For myself, I order wine and other alcoholics for medical reasons, but I also meet the wishes of my patients themselves, and do not refuse what they ask for, except for medical reasons. For instance, I would never allow a glass of beer to a patient whose insanity depended on or was interwoven with alcoholism, though I consider it a needless hardship to deny it to a chronic case of, say, monomania. It is to be remembered that I have to deal with private patients only. Were I managing an English pauper asylum I should unhesitatingly knock off the beer, secure an ample dietary, and offer the attendants an equivalent money allowance. I would be inclined to bribe workers in the fields, &c., with a lunch of bread-and-cheese and beer, and to serve out a ration of currant loaf and beer at the usual dance."

III.

The returns from those Superintendents who, from their experience of its disallowance, regard the experiment as successful.

1.—Mr. Whitcombe, the medical superintendent of the Birmingham Borough Asylum, Winson Green, writes:—"Discipline has improved; less discontent and quarrelling. Health of patients has certainly not suffered. The effect of abstinence, on drinking cases especially, appears to have a good influence. All acknowledge they can get on just as well without drink."

2.—Dr. Lyle, the superintendent of the other Borough Asylum, Birmingham (Rubery Hill), writes:—"The health of the patients has in no way suffered. I think there is more contentment among them, and no quarrelling as to certain patients getting more than their share. Indeed, I am well pleased with the result of giving no beer."

3.—Dr. Thompson, of the Bristol Borough Asylum, where beer was only discontinued September (1883), says:—"I see no evil result upon the health of the patients; and the discipline of the wards, both as to patients and attendants (especially as to the latter), is much more easily maintained."

4.—From the Cumberland and Westmorland Asylum, where, from the opening, under the superintendency of Dr. Clouston, to the present time, beer has not been used in ordinary diet, a very strong expression of opinion comes in favour of the course pursued. Dr. Campbell's conclusions, as given in his annual reports, are so well known that I will only quote one passage contained in a letter to myself:—"I use really good liquor for those who need it, and give it when I think it useful. I have always thought it foolish to give dements, criminals, and imbeciles, beer as an article of diet. If you do give it, call it by its proper name—a luxury."

5.—Dr. Hearder, of the Carmarthen Asylum, thus writes:—"The change has been entirely satisfactory. It caused no discontent either among patients or attendants. The general health has not been affected. The discipline has certainly improved."

6.—I come next in alphabetical order to the Derby Asylum. Dr. Lindsay writes:—"In my opinion the health of the patients has certainly not suffered, nor their comfort, whilst at the same time the discipline and comfort of the wards have without doubt been improved. The attendants, too, are satisfied, and have never once attempted to bring beer in. They prefer the money

compensation" (£3 5s. a year to male attendants and servants and £2 15s. to female ditto).

7.—Dr. Smith writes from the Durham County Asylum:—"Both the health of the patients and the discipline of the wards have improved."

8.—The superintendent of the Denbigh Asylum, Dr. Cox, says:—"Since the discontinuance of beer in the ordinary dietary of the patients, their health has been very satisfactory, their conduct quieter, and general disposition on the whole more contented and more easily satisfied, especially among those who are fit to undertake some form of employment. Tea, coffee, and butter-milk are given to the latter class as a substitute for beer. Their physical condition appears to be maintained provided the diet is abundant and of good quality. The discontinuance of beer among the attendants and staff, and the substitution of beer money, has improved their general conduct. Discipline can be more readily maintained, and their general health could not be more satisfactory."

9.—Dr. Saunders writes from the Devon Asylum:—"The disuse of beer, &c., has been in every way satisfactory."

10.—At the Glamorgan County Asylum Dr. Pringle thus expresses himself:—"The health of the patients has been in no way impaired, and there has been marked improvement in the discipline of the wards." "Beer to ordinary patients was never given here unless as a reward for work. *Now* workers get milk instead of beer. Before stopping the attendants' beer I got the head attendants to enquire as to whether beer or its money value would be preferred, and out of 65 attendants and servants 63 chose the latter."

11.—Dr. Merson, superintendent of the Hull Borough Asylum writes:—"The result has been altogether favourable both as to health and discipline."

12.—At the Hereford Asylum Dr. Chapman reports the result to be, although not very marked, still on the whole for the better. "This is perhaps marked," he says, "in some individual patients, and in the absence of the quarrelling that often resulted from the desire to obtain an undue supply."

13.—Dr. Chevallier, of the Ipswich Asylum, reports that the practice "has been altogether satisfactory."

14.—Dr. Pritchard Davies, the medical superintendent of the Kent County Asylum, Barming Heath, writes very strongly:—"Since we abolished beer as an article of diet the general health of the patients has improved, and the wards have been much quieter. I attribute much of this to the fact that the

patients eat more food now than they used to. When we gave beer, the first thing a large majority of the patients did, when they sat down to dinner, was to drink all the beer. After that they had not good appetites, and the consequence was that a great quantity of the food supplied was wasted and went to the farm for the pigs. As a proof of the correctness of this idea I may mention that since we abolished the use of beer the average weight of the patients has increased, and we have had to buy food for the pigs in very much larger quantities than formerly. I can speak strongly of the good effect total abstinence has had upon several of my patients. Many have told me how very hard they found it during the first few weeks they were forced to go without their beer or the usual 'spirits' at night; yet after awhile they felt better; and without any attempt to get favourable evidence from them I have been over and over again assured that they were now convinced they were better without 'drink.' I do not wish to be considered as an advocate for universal teetotalism."

15.—Dr. Cassidy (Lancaster), states that there has been "a greatly improved condition of the asylum generally," but he does not attribute this to the disuse of beer alone, but to this conjoined with a life of more freedom in the open air and indoors."

In referring to the Lancashire asylums I would remark that although I do not include the Rainhill Asylum in the non-alcoholic list, Dr. Rogers has discontinued beer in certain wards, and states that this has been done with advantage, and that he shall therefore very probably discontinue its use altogether eventually.

16.—From the Monmouth Asylum Dr. Glendinning writes:—"The discipline of the wards has undoubtedly been greatly improved, and the officers have been relieved from the perpetual requests for beer on all sorts of pleas. I do not think that the health of the patients has been in any way affected by the discontinuance of beer."

I have not included the Norfolk County Asylum as properly belonging to the non-alcoholic list, because workers are allowed a little beer, but I will quote Dr. Hills' opinion of the withdrawal of beer from the ordinary diet:—"The health of patients," he says, "is better. They are quieter, less quarrelsome, eat more, and their habits are not so faulty."

17.—Dr. Wade, of the Somerset County Asylum, has favoured me with a very full and explicit statement of his experience, premising that he is one of those who believe

that the evil influence of alcohol in the production of insanity has been grossly exaggerated. I should also say that no inference can be drawn from the death-rate in this asylum now and before the trial was made, seeing that, although it has fallen during the non-alcoholic period, this may be well attributed to improved drainage coincidently with the discontinuance of beer. He writes :—"The beer dietary acted, in my mind, injuriously in the discipline of the asylum, for there were always a large number of patients who did not care for the alcoholic beverage, and who bartered it away to others who had a craving for it, and who thus had too much. Again, attendants have frequently indulged useful patients with extra beer at the expense of others who did not work, thus causing much squabbling. Indeed, the universal testimony of the best among my attendants is that the non-use of beer saves much fighting in the asylum, and the wards are certainly much quieter here, where we use no beer, than they were in the first asylum where I was assistant, where the beer was used. But besides this, I have come to the firm conviction that the quantity of beer given to working patients in asylums is most iniquitous in principle, *e.g.*, a labouring man, comes in, who earns, say, 14s. a week. He gets for his ordinary diet half a pint at dinner and half a pint at supper. As he gets better he is sent out to work, and then is given half a pint extra at eleven and four o'clock. So when doing very easy work he gets two pints of beer daily. Is not that enough to justify the man in saying when he goes out in the world again that he *requires* two pints daily? for the doctor at the asylum gave it to him when he worked, although he did not work as hard as he has to do outside. And besides, the iniquitous principle is maintained of paying in liquor for work done, a custom that has led to much intemperance. As a fact, I never have any complaints from any patient about the disuse of beer, except from those who are manifestly the better for being without it, and for whom a short period of compulsory total abstinence is highly beneficial. The attendants themselves *unanimously* requested to be allowed money in lieu of beer, and in two years I have not had a single case of drunkenness in nearly 100 attendants."

18.—Next in order comes the East Riding Asylum, Beverley. Dr. McLeod writes that "the health of the patients has in no way suffered since beer was disused. The discipline of the wards has improved. Beer is, on the whole, a mistake in asylum dietary."

19.—At the West Riding Asylum, where the experiment has been only recently tried, Dr. Major observes in his annual report:—"Upon the whole I am of opinion that, given a satisfactory dietary in other respects, the balance is in favour of the omission of beer in ordinary cases as being at least unnecessary, and where large numbers of the insane are together under care a frequent source of inconvenience and trouble."

20.—Dr. Rutherford's views on the disallowance of beer are so well known that I need not do more than quote his observation that "the discipline and general tone of an asylum are vastly better where stimulants are disused."

I have not included the Edinburgh Royal Asylum in the non-alcoholic list, because half a pint of very weak beer is given to workers at lunch; but, as Dr. Clouston observes, this asylum may be regarded as not giving beer as a part of the ordinary dietary, and upon this his verdict is—"We certainly do not suffer in consequence."

21.—From the Fife and Kinross Asylum, Dr. Turnbull writes:—"My opinion is strongly against the use of beer. The disuse of it here has not had any prejudicial effect on the health of the patients, and my impression is that the discipline of the wards is better when alcoholics are not given."

22.—Dr. Yellowlees writes very strongly in favour of a non-alcoholic dietary:—"Here it is given either for purely medical reasons or as a mere luxury on the table of the wealthier patients (the gentlemen only; the ladies have none). I give no alcoholics to anyone as a luxury unless in the cases where it would be depriving the patient of what has been a lifelong and harmless indulgence—the glass of wine at dinner."

23.—Dr. Merrick reports of the Belfast Asylum that, although no stimulants are given to the patients or attendants other than medicinally, the health of the inmates is good. No substitute or equivalent is given.

24.—From the Ballinasloe Asylum, Dr. Fletcher writes:—"I am decidedly against stimulants save as medicine in aslyums, and consider it much more easy to maintain discipline without than with alcoholics."

25.—From Ennis, Dr. Daxon, the Superintendent writes that the general health is good, and the death-rate below the average. Milk is given at the rate of 1,000 gallons per month.

26.—Dr. Drapes, the medical superintendent of the Enniscorthy Asylum, writes:—"I believe on the whole that the discontinuance of alcohol has had a salutary effect on the health of the patients and the discipline of the wards."

27.—Dr. Oscar Woods, Killarney Asylum, says:—"I think alcoholics as a beverage not only useless but injurious, both as regards health and discipline."

28.—Dr. Hetherington, Londonderry Asylum, says:—"The health of the patients is remarkably good. Stimulants are only used when ordered by the medical officers. There is no limit attached thereto. The attendants were never allowed beer, and my opinion is that a large majority of them would be against its introduction."

29.—From the Waterford Asylum, Dr. Ringrose Atkins writes:—"The female patients working in the laundry used to have porter. This I stopped early last year, and I find that the working and discipline of that department have not been in the smallest degree injuriously affected thereby. On the male side I have found it very difficult to effect the same change suddenly."

30.—Dr. Conolly Norman, the medical superintendent of the Castlebar Asylum, where alcoholics are not given, is in favour of this course.

I would here observe that in some instances superintendents who report that alcoholics are used only medicinally do not express any opinion as to the effect on the patients, because no other practice has prevailed since the opening of the institution. Thus from the Greenock Asylum, where the expense of stimulants does not exceed a farthing a week, Mr. Hardie simply states, in reply to my query:—"Never were in use. We give officials and patients plenty of sweet milk."

Several of my Scotch and Irish friends smile at the idea which some appear to entertain that there is something new in the disuse of stimulants in an asylum, whereas they have been disallowed by them for many years. They think the matter has long passed the stage of experiment. An English superintendent takes the latter view also, very strongly.

Summary and Conclusion.

1.—Out of the 129 County and Borough Asylums and Registered Hospitals in Great Britain and Ireland, I have been favoured with replies from 100. These returns comprise 53,855 patients out of 64,103, the total number in the asylums of the description just mentioned.

2.—Of the 100 returns received, one-half report the non-use of alcoholics other than medicinally.

3.—Among the 50 in which alcohol continues to be used, eight superintendents express themselves strongly in favour of

the retention of alcohol as a beverage, and, doubtless, many hold the same view who have not expressed it. The presumption, indeed, is that in those asylums in which alcohol is used, the superintendent approves of it rather than otherwise.

4.—In regard to the 50 in which alcohol is disused, one superintendent has had his suspicions that this course has proved injurious, and another found the attempt endanger the peace of the household.

Eight superintendents have observed no result favourable or unfavourable.

Thirty superintendents hold that they have observed very beneficial results from the course pursued. The improvement usually refers to both the patients and the discipline of the asylum.

We have now 11 left who make no comment, and in most of these cases the superintendent could not make any comparison, because alcoholics had never been given in the asylum.

5.—With regard to a point of secondary but not altogether insignificant importance, the cost of alcoholics in asylums, I find that the cost per patient per annum (calculated upon the total expenditure for alcohol, and the average number of patients resident) is 12s. for Great Britain and Ireland, being at the rate of 14s. for England and Wales, 8s. 8d. for Scotland, and 4s. 8d. for Ireland. The total expenditure in alcoholic drinks is about £32,000.

This shows a marked decrease since 1878, when Dr. Brushfield made a similar calculation for England and Wales and found it to be close upon 30s. per patient per annum [£1 9s. 11¾d.].

6.—If we take the British Asylums in which beer is given as a beverage, and no substitute is given to those patients who do not take it, and no money allowance is granted to the attendants, the average annual cost per patient is £1 11s. 2d.

7.—Taking on the other hand the asylums (12) in which neither patients nor attendants are allowed alcoholics as a beverage, and where no substitute or allowance is given, the average annual cost per patient is 2s. 1d.

8.—The cost of alcoholics is 3s. 9d. per annum per patient in the 50 asylums where they are not allowed as a beverage, but where substitutes are given to patients and allowances to attendants, and including several cases in which beer is occasionally given to attendants.* This also includes the 12 asylums appearing above where no alcoholics are allowed and no substitute or allowance is given. In 16 of the non-alcoholic asylums,

* *i.e.* The beer thus given to attendants makes the difference between 2s. and 3s. 9d.

milk, tea, coffee, cocoa, or beef tea are given to the patients and attendants, and in 15 of these Asylums, a money allowance, and in 2, uniform are granted to attendants.

In estimating the cost of substitutes and allowances, in order to ascertain the relative cost of an asylum in which alcoholics are given and one in which substitutes are provided, it may be of use to append the relative cost of beer or porter, and of milk, as calculated several years ago by Dr. Brushfield :—

	per gallon. s.	d.
Beer at 16s. per barrel	0	5·35
Porter at 29s. 8d. per barrel	0	9·88
Milk, supplied from the farm, valued at ...	0	10
Ditto, by contract	1	0
Skim Milk (only half the cream removed) ...	0	6

Dr. Pringle (Glamorgan Asylum) found that the cost of beer supplied to his patients was £260 a year, and that this sum would purchase rather more than 14 gallons of milk daily in addition to what the patients then had. He believed, however, that 10 gallons were quite sufficient, which would cost £159, thus effecting a saving of £100, which Dr. Pringle proposed to devote to the attendants.

One thing seems to me to be very clear, viz., that it is a mistake to have a different diet in the matter of beer with regard to patients and attendants. If the patients do not take any beer as a beverage, it may answer to offer an inducement to the attendants to receive a money equivalent for their own beer; but so long as the patients have beer, it is a great mistake to pay anything to the attendants in lieu of beer.

I would here say that I do not see how any distinction can be made in the dietary between those who are of intemperate habits and those who are sober. It would be to make the former a marked man, and would be most undesirable. This, however, will appear to many to be some reason for disallowing beer altogether at meals.

It is, indeed, impossible to ascertain accurately the number of patients who have been of intemperate habits. Dr. Brushfield gives proof of this, for of 70 readmissions, in only one was intemperance stated to be the cause; whereas he found on strict enquiry, especially just before the patient's discharge, that in no less that 18 this was the cause in a greater or less degree. Hence, when least wishing to give a patient alcohol, it may be made part of his dietary.

In presenting the facts now detailed, I have chiefly in view, as I said at the beginning, the provocation of a discussion. The

materials are before you, and you are as competent to draw your conclusions on the evidence as I am.

For myself, I confess I was not prepared to find that so many asylum superintendents in England and Wales had discontinued stimulants other than medicinally. Still less was I prepared to receive such strong expressions of opinion in favour of this course, both as regards the health of the patients and the increased order and discipline of the asylum.

The counter expression of opinion comes from those who have not tried the experiment, with the exception of Dr. Claye Shaw, who, having made it, promptly retired before the insurrection which menaced him; and with the exception (to a qualified extent) of Dr. Ashe, who, however, continues to disallow beer at Dundrum.

I can sympathise with the feeling that it is rather hard lines to cut off a poor man's beer who has been accustomed to it all his life. On the other hand, we must remember that in the administration of an asylum, a balance must often be struck between conflicting interests; and I do think, in this beer question, that if the health of the patients does not suffer and the discipline of the asylum is better maintained, asylum authorities are fully justified in discontinuing the use of stimulants other than medicinally, even if a few patients feel it to be a hardship. I am glad that hitherto the change has been almost always made at the instance or with the full concurrence of the medical superintendents themselves and not their committees. I hope that pressure will never be put upon the former to make a change, and that they will not adopt it unless they honestly think that it is on the whole for the good of the institution they superintend. I would here make one observation arising out of the remark frequently made in the Returns, that the beer is so weak in its character that it cannot possibly do any harm to the patients. Well, if that be so, one cannot suppose that much good can come of it either; and while I wish to keep the question of expense in a subordinate place, I should be disposed to query whether the present large outlay on beer alleged to be too weak to have any effect, is altogether justifiable. I do not think the substitutes given and the money allowance will often equal the amount spent at present in asylums where alcoholics are freely allowed; but I should be very glad to know that, where they are discontinued, the dietary is proportionately increased, and the wages of the attendants and the cook raised.

CLINICAL NOTES AND CASES.

Clinical Cases.—By JOSEPH WIGLESWORTH, M.D.Lond., Assistant Medical Officer, Rainhill Asylum.

I. *Case of Apoplectiform Cerebral Congestion, or Serous Apoplexy.*

Annie P., æt. 35 years, had been an inmate of Rainhill Asylum for 12 years. She was subject to attacks of recurrent mania, in the intervals between which she would be quiet, orderly, and rational; the attacks usually lasted some months, and were attended with great restlessness and loquacity, but not with much incoherence. She was at these times very mischievous and destructive, and was indeed a very troublesome patient — generally appearing to have a very good notion of what she was about, and seeming to commit many of her destructive acts on purpose to give trouble, though this apparent capacity for self-restraint was doubtless illusory. In April, 1883, she had been for upwards of 18 months in a maniacal condition, which attack had thus been not only unusually prolonged, but had also been in some respects exceptionally severe. On May 1st following she did not appear very well, but exhibited at that time no special symptoms beyond a little mental dulness and some delay in responding to questions. These symptoms gradually increased, and though there were no physical signs of disease, patient called out at times when moved; she took her food fairly well, but had to be fed, and her bowels were freely relieved after medicine. At 2.15 p.m., on the 5th inst., a great change was observed in her; her face was noted to be livid, conjunctivæ insensitive to touch, pupils much dilated, being each about 6 mm., and did not respond to light; respirations slow; pulse 80, full; temp. about 95° (the index did not rise at all, and the thermometer did not register lower); limbs flaccid; plantar reflex, very slightly marked, as also were the knee jerks. She was, in fact, deeply comatose, and presented all the symptoms of cerebral hæmorrhage, a diagnosis of which was, with some confidence, made. Two drops of croton oil were given, and an enema, but neither had any effect. At 5 p.m., in addition to deepening coma, there was distinct drawing of the angle of the mouth to left. The eyes were directed straight forwards, or with a very slight external deviation in each. At 10 p.m. every muscle in the extremities appeared absolutely flaccid, and the reflexes were completely abolished. Pupils as before. Respirations irregular, with mucous rattling in throat. Pulse 110, bounding. Temp. about 95° (the index, as before, would not rise at all). 11.45 p.m., died.

7th. *Autopsy* (38 hours after death).

Cranium. Calvaria normal; dura mater not abnormally adherent

thereto. A little black clot at posterior part of longitudinal sinus. No excess of fluid in subdural space; no bagging of the dura-mater, the surface of the brain being everywhere closely pressed against it. Veins of meninges fairly distended, but by no means abnormally so. Arachnoid a little thickened over lower surface of pons, but not elsewhere. Marked injection of pia-mater over convex surface of brain, giving it a slightly rosy appearance. Pia-mater a little difficult to strip on account of its tenuity. General pink-staining of surface of cortex. Gyri not at all wasted, but everywhere firmly in contact, the subarachnoid fluid being absent, or nearly so. Cortex apparently normal, not diminished in depth, and striation distinct. Ventricles somewhat dilated, and distinctly distended, with clear fluid. Puncta cruenta numerous. Brain generally of fair consistence—a little wet. Basal ganglia decidedly soft; fornix very soft. Cerebellum, pons, and medulla healthy. Basal vessels healthy.

Brain (immediately after removal) 1,318 grammes.

Right hemisphere...	568	stripped of membranes to great extent.
Left ,, ...	555	
Cerebellum	141	
Pons	15	
Medulla oblongata	8	
	1,287	

Thoracic and *abdominal* viscera normal.

Remarks.—The pathology of this case appears to me by no means clear. *Idiopathic cerebral congestion*, terminating fatally, is an affection which, though described in text books, is one about which no little obscurity rests; whilst as regards *serous apoplexy* we are told that this term ought to be discarded from our nomenclature. As will have been seen, the symptoms presented were so strikingly those of brain pressure, and, in their pronounced form, came on so rapidly, as to lead to a confident diagnosis of cerebral hæmorrhage, probably ventricular. The conditions noted after death, namely, distension of the ventricles with clear serum—convolutions pressed together, with absence of subarachnoid fluid—harmonised with the clinical symptoms, and might be supposed to favour the view of a primary effusion of serum into the ventricles—a serous apoplexy.

On the other hand, whilst signs of venous congestion were absent, those of arterial hyperæmia were manifest, as instanced by the injection of the pia mater, and the pink staining of the surface of the gyri.

I should myself favour the view of a primary arterial

hyperæmia of the brain, the effusion of serum into the ventricles being purely a secondary phenomenon, but why such hyperæmia should have taken place I am quite at a loss to understand.

The case suggests some reflections, both as regards diagnosis and treatment. How is such a case to be distinguished from cerebral hæmorrhage, especially when this occurs in the ventricles? In connection with which point let me emphasize the fact that the temperature was, and remained, sub-normal. Then as regards treatment: possibly active treatment in the form of bleeding, ice to the head, &c., might have resulted in the recovery of the patient; but the resemblance of the symptoms to those of cerebral hæmorrhage prevented a resort to what, in such case, would certainly have been nugatory.

II. *Four Cases of Melancholia in One Family.*

Elizabeth B., æt. 47, single, domestic servant, was admitted into Rainhill Asylum Oct. 28th, 1879. She had been nursing a sister who was suffering from what was called "religious mania," and had lost her rest in consequence. Two days before admission she hung herself in a wash-house with a rope, but was discovered and cut down in time to prevent serious consequences. On admission she was noted to be a thin, spare woman, but, with the exception of slight pulmonary emphysema, her viscera appeared sound. She had a very depressed appearance and manner, but her conversation was collected and rational, and, beyond the abnormal depression, there did not appear to be anything wrong. She rapidly improved, and in three weeks' time was quite cheerful, and working well in the ward. She was discharged, recovered, on December 19th.

She has been seen at intervals since her discharge, and had remained well up to the time she was last heard of, about a year ago.*

Margaret B., æt. 33, single, housekeeper, was admitted Jan. 6th, 1880. She was the sister whom Elizabeth B. was nursing when she (the latter) broke down. Her history was simply to the effect that she had got despondent without obvious cause some seven months previous to admission—thought she could not be saved, &c. She was a rather short, dark-featured woman, fairly nourished, with healthy thoracic and abdominal viscera. She had an aspect of great depression, and a nervous, frightened manner. She sat all day with her hands before her doing nothing; she seldom spoke, unless when addressed, and then gave utterance to various melancholic expressions and self-accusations, such as that she was the greatest sinner on the earth, that she had committed adultery, &c.; in fact she presented the symptoms of typical melancholia. She improved somewhat in the

* Since the above was written this patient has committed suicide by drowning herself in a reservoir.

course of the first month, and occupied herself with needlework, though she kept very low and desponding. After this, however, she relapsed, became exceedingly depressed, and threatened more than once to commit suicide. By the beginning of July she had improved very much, having got fairly bright and cheerful, and appeared to have lost all her old gloomy thoughts and delusions. This improvement was maintained, and she was discharged, recovered, on August 16th.

She had remained well up to the time she was last heard of, about a year ago.

Margery G., æt. 37, was admitted July 26th, 1881. She had been married 13 years, and had had two children and two miscarriages. The last child had been born 4½ months previous to admission; she suckled this child for about a fortnight, but then had to wean it on account of getting an abscess of the breast; this suppurated for 13 or 14 weeks, and required frequent incisions. This long continued drain had pulled her down a good deal, and appeared clearly to be the exciting cause of her illness, which commenced about two months previous to admission, with symptoms of depression. She said she was a sinner, and that the devil had got hold of her; she then tried to strangle herself. Though continuing depressed, she improved somewhat for a time, but relapsed again, and shortly before admission got very excited, and attempted to kill one of her children. On admission she was noted to be a thin-featured, dark-complexioned, little woman, of spare habit, but fairly nourished. Viscera normal. Her case, though substantially similar to that of the sister last described, proved much more severe and prolonged. She was at first very quiet, but appeared distressed and terrified, had a nervous, fidgety manner about her, and it was difficult to get her to speak. She continued quiet and depressed for the first month, but subsequently got very agitated, and for about three months presented, more or less typically, the symptoms of "melancholia agitans." She was full of the most mournful self-accusations, constantly repeating that she was the most wicked woman in the world, that she ought to be locked up, that she had turned against her husband and children, &c.; and she at times threatened to commit suicide. She was all day long giving utterance to these expressions, and was at the same time very restless, rubbing the top of her head with her hands until she had made it quite bald. She then improved for a time, though continuing depressed, she was more settled, and was got to occupy herself with needlework. By the end of December, however, she had relapsed again, and was almost as bad as ever. She continued very restless and agitated, with occasional intermissions, during the first few months of the following year; but gradually the acute symptoms diminished, and by the autumn had quite subsided, though she still kept depressed. In January, 1883, she was very much better; she had entirely given up all her old self-accusations, was quite rational, and, with the exception of some slight

depression at times, was quite well. The improvement continued, and she was discharged, recovered, on March 19th.

The sequel to this case was melancholy. In June of the present year, about 14½ months after her discharge from the asylum, she left her home one evening ostensibly with the object of visiting a relative, taking with her her two children, aged respectively 15 years and three years. Whilst walking along a canal bank she suddenly jumped into the water, and thus committed suicide. She dragged her two children into the water with her, and the younger of the two was drowned with her mother, the elder managing to scramble out. It came out in evidence at the inquest that she had been in a low state of mind for some months, and had said that she wished someone would put an end to her misery, and whilst in the water she exclaimed to her daughter that it was better they should all die together than be parted again. She was daily expecting her confinement, which was doubtless the cause of the relapse which had obviously occurred.

Ellen, the fourth sister, did not come under personal observation, but, as will be seen by the history, she had obviously suffered from melancholia.

Family history.—Both parents were natives of Lancashire, in no way connected before marriage, and said to be steady, hard-working people. Father still living, æt. 77; mother died, æt. 56, of "softening of the brain." She was paralysed for three years before her death, but her mental faculties are said not to have been affected. With this doubtful exception there was no history of mental disease or neurosis of any kind on either side of the family.

There were eight children in the family, of whom the following is an account:—

1. John, the eldest, got into a very depressed condition about nine years ago, after the death of his second wife. That there was here an adequate cause for depression is patent, but from the account given, stating that he was at home for some time and so depressed he could do nothing, it is probable that he also suffered in some degree from melancholia.
2. A son, who died in infancy.
3. Thomas, died æt. 18 of "typhus fever."
4. Elizabeth (case described above).
5. Ann, æt. 44; single; never mentally affected.
6. Ellen, died of consumption, æt. 37. Was married 10 years before her death, and had three children. She became insane for a time after the birth of her first child, "getting very dull and stupefied;" she was treated in the workhouse, and recovered from this attack, but had a second attack before her death.
7. Margery (case described above).
8. Margaret (case described above).

Remarks.—These cases are interesting, not individually, but collectively, such a series occurring in one family being cer-

tainly unusual and, more particularly so in the absence of clearly marked hereditary taint. The case of the mother must of course be looked upon as doubtful. From the accounts given this would seem to have been an ordinary case of cerebral hæmorrhage, or thrombosis, and, if so, it would lie outside the neurotic diathesis. As above noted, her mental faculties were said to have been clear; but we know how unreliable are the statements of patients' relatives on this point, even when there is no intention to deceive, and the nature of the case must therefore remain doubtful. It will be seen that of the six members of the family who attained to adult life, all but two suffered at different times from melancholia of greater or less intensity, and two of these cases eventually terminated fatally by suicide; in fact, if we take the depression manifested by the eldest son to have been pathological—and from the account of this furnished I should myself be disposed so to regard it—only one adult member of the family has hitherto escaped. This unusual consensus of cases is, I think, worthy of being placed on record.

Notes of a Case of Addison's Disease Associated with Insanity.

By S. Rutherford Macphail, M.D.Edin., Assistant Medical Superintendent, Garlands Asylum, Carlisle.

(*Read at the Quarterly Meeting of the Medico-Psychological Association held at Perth, November 21st,* 1884).

The rarity of cases of Addison's Disease, and the want of accurate knowledge alike of the clinical features and of the pathology, justify the record of the following case.

John F., æt. 42, carter, admitted to Garlands Asylum Jan. 10, 1883.

History.—The Relieving Officer who brought the patient could only give a very meagre account of the onset of the mental symptoms, and was unable to furnish any definite information respecting the state of his previous health.

He is said to have been a hard-working, healthy, and fairly temperate man, in constant employment. Two years ago he sustained an injury to the right knee, which necessitated rest and confinement to bed for a few weeks. There was a hereditary predisposition to insanity, his mother having been an inmate of an asylum. The exciting cause of this attack was said to be attending revival meetings. At one of these gatherings symptoms of mental aberration first became apparent, and he had been excited a week previous to his admission

to the asylum. Some years ago he had two short and slight attacks of excitement, but got well at home.

Present Condition.—He is a short, thick-set, well-developed and muscular man, with dark shaggy eye-brows, and black hair. His complexion is muddy and sallow, and the general appearance of the man gives the impression that he has not been washed for a considerable time. He has an anxious, wistful expression ; eyes wide, conjunctivæ white and glistening ; pupils equal and contractile ; tongue moist, slightly furred ; pulse 108, soft and full ; temperature 98·2 ; weight 170lbs. The special senses and sensibility to pain are normal; cutaneous and tendon-reflex excitability increased. He walks lame. The right knee-joint is swollen, tender to the touch, and the surrounding tissues are indurated, but there does not appear to be any active inflammation. The patient is in a restless, excited, emotional state, continually shouting, preaching, praying, and talking in the most flippant manner on religious subjects. Owing to his great restlessness it was impossible to make a thorough examination of the chest and abdomen, but as far as the examination went, it was negative, no active physical disease being detected.

Progress of Case :—Jan. 12. Since admission he has been noisy, restless, sleepless and perfectly incoherent in conversation. He cannot answer questions, and he carries on an incessant rambling talk, either counting numerals rapidly, or talking to imaginary horses.

Appetite bad ; he requires much coaxing to be induced to take any food at all. Temperature and pulse have both been slightly over normal for the last two days. Soap and water have only partially removed the dark and muddy colour of the skin. The duskiness is general, but is more pronounced on face and in flexures of arms and thighs.

Jan. 14.—During the last two days he has been more settled and rational, and this morning he gives coherent answers to questions. Last night he was sick and vomited after supper. The bronzing of the skin is now more marked. It appears to affect the whole cutaneous surface and the mucous membrane of the lips. In some places the colouration is very distinct, and on the face, neck, axillæ, hands and loins, the pigmentation occurs in dark brown patches.

Jan. 21.—Temperature normal, pulse quickened, small and soft. He has an anxious expression and looks ill ; conjunctivæ yellowish ; complains of no pain but says he feels sick ; has a slight cough, a few bronchitic râles heard over sternum ; urine pale, acid, non-albuminous ; liver dulness extends one inch below margin of ribs ; slight tenderness on pressure over epigastrium. He has had several attacks of vomiting during last week ; after these gastric attacks, the bronzing of the skin becomes intensified.

Jan 26.—Mental symptoms vary. He is one day excited and the next depressed, and it is only very occasionally that he can be induced to answer simple questions about himself. There is marked asthenia, and he is now so weak that he is kept in bed. The vomiting and

retching are very distressing, and he retains little except cold water, for which he has a great craving. Bismuth, hydrocyanic acid and sinapisms have been tried with little effect. Nutrient enemata were given for a couple of days, but were not retained. He complains of pain in the loins and abdomen, chiefly after vomiting.

Feb. 8.—Vomiting continues occasionally, but is checked by ice and sinapisms to epigastrium. His diet consists of small quantities of milk and water; he rejects everything else almost immediately.

March 2.—Mental condition worse. He is emotional, cries like a child, and has a very miserable appearance. During the last three weeks he has been steadily growing weaker and losing ground; weight 115lbs. On some occasions he seemed better, but the improvement never lasted more than two days at a time, and the relapse was always ushered in by a severe attack of vomiting. He takes no food, but drinks a fair quantity of milk and whiskey. Bowels constipated; have to be moved by occasional enemata. He has a very cachectic appearance; the conjunctivæ are yellow, and present a marked contrast to the dark hue of the face and lips; tongue clear and moist. Bronzed patches can now be distinctly recognised on the lower extremities from the knees downwards.

March 10.—He is now quite childish and weak-minded, can exercise no self-control, and will scarcely answer the most simple questions. His habits have become very filthy, and he daubs himself and his bedclothes with fæces.

March 19.—For the last few days he has been so weak that no physical examination was possible. On several occasions he appeared to be dying of asthenia. Last evening he had a fainting fit and lost consciousness for some minutes, pulse scarcely perceptible. He shortly rallied, however, passed a fair night, and appeared to sleep. He died this morning at 9.15 in a syncopal attack similar to the one last evening.

Autopsy 55 hours after death. Body thin, much emaciated, of a uniform yellowish brown colour, no definite patches of pigmentation observed. Right knee-joint swollen; synovial membrane thickened and indurated.

Brain.—Cerebral sinuses and meningeal vessels filled with dark semi-clotted blood; brain firm on section, nothing abnormal detected.

Heart.—Right side dilated, muscular substance flabby.

Lungs.—Bound to chest wall at apices by old adhesions, nodules of miliary tubercle sparsely scattered through both lungs.

Stomach normal.—In the large intestine the fæces were in yellowish nodules of the size of marbles.

Liver.—Slightly enlarged and congested; capsule thickened; old adhesions to stomach and diaphragm; structure normal.

Spleen and Kidneys normal.—*Supra-renal Capsules* both enlarged, weight of right over an ounce; of left three quarters of an ounce. They were nodulated and irregular in outline, firm to the feel, and lay em-

bedded in a mass of cicatricial tissue. The increase was chiefly in breadth and thickness rather than in length. On section they consisted of a whitish, translucent, semi-cartilaginous material with yellowish patches.

Microscopical sections of one of the supra-renal capsules were made for me by my friend Dr. E. Baily. The outer coat was thickened and made up of dense fibrous tissue. The stroma consisted of a fibro-nuclear growth close to the outer portion of the organ, and this small cell infiltration could in places be traced into the formation of fine fibrous tissue. The interior was made up of an undefined structureless material containing large cells of an irregular shape, hyaline masses, and many large giant cells. Several of the cells had undergone caseous degeneration. The blood vessels, especially those near the periphery, showed great thickening of the muscular coat, and endarteritis with proliferation of the epithelium.

The solar plexus and the semilunar ganglia were not examined.

Remarks.—The clinical history and pathological appearances all point to this being an undoubted case of disease of the supra renal capsules, commonly known as Addison's Disease. Although several isolated cases had been reported previously, Addison, in his original monograph,* was the first to discriminate, in the living patient, this remarkable train of symptoms, and associate them with a definite morbid condition of the supra-renal bodies. Wilks has added to our present knowledge of the disease by a succession of papers published from time to time in "Guy's Hospital Reports," while Greenhow, in the Croonian Lectures for 1875, has summarised all that is at present known of the disease, and collected the statistics of over 300 reported cases. He also read a paper on Addison's Disease at the International Medical Congress (1881), which lead to an interesting discussion.

I am not aware that this condition has ever been reported in association with insanity. If so, I have been unable to find any reference to the fact in the ordinary text books, and in this respect the case would appear to be unique. Griesinger,† a recognised authority on mental disease says: "In Addison's Disease there is generally great depression of sentiment, but no case of actual mental disease is known to me."

It is unfortunate that the previous history of this case is so incomplete, but the clinical features after the patient came

* "On the Constitutional and Local Effects of Disease of the Supra-renal Capsules." London, 1855.

† "Mental Diseases," New Syd. Trans., p. 198.

under observation are very typical and correspond accurately with the description given by Jaccoud, quoted by Trousseau,* from an analysis of 127 cases:—"An asthenia which goes on increasing up to death, a melanodermia presenting special characters, gastric disturbances and pains in the loins and abdomen." Indeed, the only anomalous symptom in the case was the persistent yellowish tint of the conjunctivæ, which are described in the text books as retaining their normal pearly lustre throughout. The injury to the knee is an interesting point, for Bristowe † says that the first symptoms are often attributed to local injury. The varying character of the bronzing is also worthy of remark, for the apparent increase in the pigmentation following a gastric attack does not appear to have been observed by any writers on this subject. The disease appears to be uniformly fatal, and treatment can only attempt to be palliative. Iron, quinine, and stimulants were in turn administered in this case without appreciable benefit, while the gastric symptoms were only in a slight degree amenable to treatment. Little is known of the causation of Addison's Disease, and it is still a moot point whether disease of the supra-renal capsules is a primary affection, or whether it is secondary to changes in the sympathetic nervous system. Physiologists have hitherto been unable to ascertain the accurate functions of these organs, but that they are necessary to life is proved by the researches of Brown Sequard,‡ who found that death occurred in animals very quickly after their removal. Some authorities, notably Virchow and Greenhow, believe that Addison's Disease is intimately connected with structural alterations in the sympathetic, and that the degeneration of the supra-renal capsules is secondary. Eulenburg and Guttmann have collected 32 cases in which the pathological appearances are detailed. In 12 the supra-renal capsules alone were diseased, and no change was observed in the sympathetic, while in 20, in addition to degeneration of the capsules, lesions were detected in the solar plexus, semilunar ganglia, and in the nerves supplying the supra-renal capsules.§ Therefore it appears that the results of examination of the sympathetic are antagonistic to one another, at one time negative, at another positive. It has also been suggested that

* "Clin. Medicine," New Syd. Trans., Vol. v., p. 158.

† "Practice of Medicine," 4th Ed., p. 559.

‡ "Comptes Rendus," 1857, Tome xliv., p. 246.

§ "Sympathetic System of Nerves," "Journal Ment. Science," Vol. xxiv., p. 531.

the supra-renal bodies exert some important influence on the condition of the blood, and so cause the train of symptoms found in Addison's Disease, in other words that it is a disease of anæmia. Unfortunately for this theory, however, the observers who have examined the blood have hitherto not found any constant departure from the normal state.

There is no evidence to prove any relationship of cause and effect between the physical and mental symptoms in this particular case. Undoubtedly there is an intimate correlation between changes in the skin and changes in the higher nerve centres, and these are frequently of a permanent, as well as of a temporary nature; but as far as our present knowledge goes, we are only justified in considering the occurrence of a maniacal seizure in the course of Addison's Disease as a mere coincidence.

OCCASIONAL NOTES OF THE QUARTER.

Over-pressure in Schools.

Although we have no reason to suppose that the storm that has been raised on the subject of over-pressure in Board Schools has altogether subsided, but, on the contrary, think there will be much more said, written, and, above all, done, we nevertheless are disposed to glance at the present aspect and position of the movement, and to endeavour to ascertain whether definite conclusions have been reached, and whether any practical course of action is called for. We put aside as irrelevant to the general question at issue such questions as whether Dr. Crichton Browne assumed a more official position than was ever intended by Mr. Mundella, whether the Report* branches out into disquisitions not germane to the subject in hand, whether the tone of the Report is altogether befitting a scientific investigation, or whether, as the critics say, its style is open to the charge brought by Lord Beaconsfield against that of his great rival, however unjustly. Nor is it relevant to the main question whether Mr. Mundella acted rightly in occupying the time and thought of a public servant required to devote the whole of his energies to his own department, and already "ab-

* Report of Dr. Crichton Browne to the Education Department upon the alleged over-pressure of work in Public Elementary Schools, July 24, 1884. Also the Memorandum relating to this Report by Mr. Fitch, one of Her Majesty's Inspectors of Schools, August 4, 1884.

sorbed in his own official duties"—duties understood to be very onerous, in spite of the Act of 1882, which, by mitigating in some respects the irksome rigour of certain regulations respecting the visitation of Chancery lunatics, rendered the demand upon the time of the Visitors less open to the charge of "over-pressure." Some may say, indeed, that Mr. Mundella, not content with his inhumane proceedings in his own department, has extended them into another, and sanctioned what is analogous to keeping boys in after school hours and setting them lessons to learn at home. It is not surprising under these circumstances that Dr. Browne apologises for any imperfections there may be in his work by stating that his "observations have been made in such brief intervals of leisure as I have been able to obtain from my official duties, and have been necessarily fragmentary and limited in extent." All these are matters of indifference to those who simply wish to ascertain whether over-pressure in schools is a serious evil at the present time, and who do not intend to be diverted from their object by the critics.

The detention in school of large numbers of children beyond the school hours is the first evidence of over-pressure which is adduced. While in some schools this rarely exceeds a quarter of an hour a day for two months in the year, and only applies to some of the children, in others it has been protracted to an hour and a half, and has been applied to all the standards for six months in the year. It must be admitted that the ordinary school hours, from 9 a.m. till noon and from 2 p.m. to 4.30 p.m., are long enough for children from seven to fourteen years of age.

Home-lessons constitute the second proof, and the evidence appears to us conclusive. To this we shall return.

The emphatic testimony of the teachers themselves is the third and very important proof of over-pressure. Out of sixty teachers questioned by Dr. Browne only two denied its existence. It should also be added that since this Report, a very large number of the teachers of Board Schools have met together to consider it, and have strongly endorsed it. Mr. Fitch defends the setting of home-lessons, and states that he always looks at the home-exercises and makes inquiries of the teacher in regard to his practice. We are, however, still jealous in regard to the abuse of this custom, nor can we affect to be sorry to learn that recent public discussions have tended to discourage teachers from what Mr. Fitch regards as the "legitimate use of home-exercises."

A fourth source of evidence is derived from the condition of the children themselves as seen by an ordinary observer, who would be able with a little attention to pick out the backward children, those, namely, on whom over-pressure tells most, and to divide these into the dull, the starved, and the delicate. It is strongly urged that if these backward children are expected to do just as much as the bright and clever children, there must be a considerable amount of over-pressure. Does not the reputation of the school demand that they shall be forced to meet the requirements of the examination? In reply to these objections of Dr. Browne against the system of forcing backward and clever children alike through the same examination, Mr. Fitch asserts that considerable exemptions are made, and that an inspector "never examines for the standard a child who for any reason is placed by the managers on the exemption list." We are glad to learn that "in practice the rule permitting exceptions and withdrawals has been used by managers and teachers generally, though on the whole very carefully and judiciously; and the inspectors have been instructed in cases of doubt to allow freely all such exemptions which are claimed on the ground of the interests of the scholar; although, of course, they do not permit indiscriminate withdrawal of children on the ground that the teacher fears that they may not pass."

That the effect on half-starved children of cramming their minds with lessons must be injurious seems too obvious to require proof. Mr. Marchant Williams is quoted as having found in one of the Board Schools in London that 36 per cent. of the parents were out of work, that 40 per cent. of the children came to school sometimes without a breakfast, and 28 per cent. to afternoon school without any dinner.

When Dr. Browne has to answer the question whether over-pressure causes insanity, he comes into collision with the Commissioners in Lunacy, who maintain that the increase of insanity in England is apparent and not real, a view which, as is well known, has been ably supported by Dr. Lockhart Robertson in the columns of this Journal. It must be admitted, we think, that even if the proportion of the insane to the population is stationary, there may be fresh causes of insanity, such as over-pressure and worry, which take the place of some of the malign influences which have received a check from the social reforms of the last twenty years. We doubt, however, whether Dr. Browne strengthens his argument by referring to malaria, small-pox, and fevers

as formerly prolific causes of mental disease. The chief, if not the only, change for the better in the way of lessening the production of insanity would seem to be in the reduction of the amount of alcohol consumed. We are surprised also that Dr. Browne should find any cause for congratulation in the change of the emotional atmosphere of the country, which is now, we are assured, "calm and settled," and "free from those violent storms of political and religious excitement which invariably leave a large quantity of mental wreckage behind them." We should have thought, taking the periods chosen (1862 and 1882), that the former had the advantage of not having been invaded by the excited followers of Messrs. Moody and Sankey and the uproarious proceedings of the Salvation Army, who are surely responsible for a much larger "quantity of mental wreckage" than are any of the religious agitators of twenty years ago.

If, however, we are correct in this view of the relative influence of the various factors of insanity now and at the earlier date, we should still leave an ample margin for the effect of over-pressure in schools in inducing nervous affections and increased liability of the brain to become affected with disease evidenced by insanity. This may be taken as the equivalent of what has been gained by the spread of temperance.

We next come to the alleged influence of over-pressure in inducing hydrocephalus, in which is included tubercular meningitis, as well as "water on the brain." Dr. Browne meets the objection that in spite of the diffusion of education the death-rate of hydrocephalus has been steadily falling, by showing that this is attributable to the diminished prevalence of hydrocephalus in infants under five, while at all ages above five the death-rate has greatly risen. The former is explained by the influence of sanitary reforms, while in the rise of mortality in later life, Dr. Browne finds a new factor at work, namely, brain excitement and fatigue consequent upon school work. On this point there will be a difference of opinion, for however probable it seems that excessive mental work should cause tubercular meningitis, there is no scientific proof that this really occurs, and those who regard the question from a purely clinical point of view will probably deny that they have ever been able to connect the action of mental processes of any kind with a single case of meningitis. So of cephalitis, in regard to which Dr. Browne gives a table showing that between 1861 and 1880 the death-rate from this

disease has nearly doubled. One difficulty, moreover, which attaches to this table is the much greater recognition by medical men of brain diseases, in consequence of which more cases would be credited to cephalitis* now than formerly. With a view of escaping this fallacy, Dr. Browne takes diabetes, about which it is probable there would not be the same difference of opinions at different periods. As this disease is largely due to nervous conditions, and as it has increased in children and young persons, Dr. Browne makes use of the fact in support of his position, although he does not maintain that the increase of diabetes is connected directly with over-pressure.

We pass over the tables showing the increased mortality in nephritis, Bright's Disease, and rheumatism, and pass on to the liability to headache in the elementary schools of London. Of 6,580 children examined, 3,334, or 46·1 per cent., professed to suffer habitually from headache. Here again all will not be able to follow Dr. Browne in his conclusions, for in the first place, in spite of the precautions he assures us he took, an uncomfortable impression is left upon the mind that a part at least of the result obtained was due to the familiar pitfalls of Suggestion and the Imagination. Mr. Fitch, who was present on some of the occasions when the children having headache were requested to hold up their hands, appears to have been much struck with the probability of this source of fallacy,† and his well-known intelligence and his long familiarity with the habits of children ought, we feel bound to admit, to count for something. We fail to see how "the promptness, simultaneity, with which a little grove of hands was held up" was any

* The returns under this head must be vague and untrustworthy in the extreme, but this does not affect the argument, as they point to some disease of the nervous system.

† In justice to Dr. Browne, we should add that the statement that "Dr. Browne's questions were in all cases clearly suggestive of the kind of answers he desired or expected to receive" of course only applies to those schools in which Mr. Fitch was present and observed, "with some amusement, the peculiar methods by which Dr. Browne sought to verify the conclusions he had already arrived at and publicly set forth." Or, again: "I confess that I witnessed with astonishment the manner in which the data for remarkable statements were got together. When I visited a pupil teacher's centre-class with Dr. Browne, leading and highly suggestive questions were put; hands were held up and counted; impressions and opinions were asked for and apparently accepted as facts; and there seemed to me to be a lack of the most ordinary precautions for distinguishing between what was typical and habitual from what was only occasional." We repeat, Mr. Fitch's criticism only applies to what he himself alleges to have observed.

presumption in favour of a genuine experience. We should have been inclined to draw a contrary conclusion. Again, if there were any who regarded headache as "a moral delinquency, the confession of which would be followed by caning or keeping in," about which we are very sceptical, we should suppose that far more held up their hands in the hope of procuring a holiday on the ground of headache, for which so charming an opportunity presented itself of obtaining a certificate from a medical visitor.

The other objection to these cephalalgic tables arises from the entire absence of a similar enquiry among the same class of children not subjected to school work. Such a table may not in the nature of things be procurable, but none the less is the conclusion arrived at lacking in the conditions of scientific evidence. It is psychologically interesting, apart from the question of over-pressure, that a very able head-master of one of the Board Schools found that the attention which the enquiry had drawn to subjective sensations had largely increased "the number of complaints of headaches, giddiness, faintness, sleepless nights, &c., and these complaints form strong reasons for absence from school. Complaints never before heard are now too frequent, of over-pressure causing these attacks."

We next come to the very important question of whether sleeplessness is of frequent occurrence among Board children. Dr. Browne found it difficult to obtain definite information, but he says: "My statistics and the inquiries made in collecting them, have borne in upon me forcibly two or three general conclusions, viz., that there is really a great deal of sleeplessness amongst the children attending elementary schools in London; that some of this is caused by over-pressure; and that some of it, which is attributable to entirely different causes, conduces to over-pressure by keeping the children in a state of nervous exhaustion in which they are particularly liable to be detrimentally affected by their school works." Reduced to figures, the procurable information showed 41·04 per cent. of the boys and 35·09 per cent. of the girls suffered from sleeplessness, and that the lower standards suffered more from it than the upper, which is a fact which at first sight seems opposed to the idea of the influence of over-pressure, but is referred by Dr. Browne to the effect of muscular action and fatigue. Dr. Browne found that talking in sleep and somnambulism are common. Of 381 boys, 129 were sleep-talkers, and 28 were sleep-

walkers; of 432 girls, 17 were sleep-walkers, and out of 382 in another school there were 20.

Chorea was sought for, but not found, probably in consequence of cases of this disorder being at once removed from school. However, out of 6,580 children 48 exhibited peculiar movements; at any rate, when agitated. It is found that the death-rate from chorea is almost exactly the same as it was twenty years ago. Our own experience is certainly in favour of a causal relation between over-pressure and chorea, but it applies to those of older growth.

Stammering appears to be benefited instead of aggravated by schooling, and it is only fair to place this to the credit of the Educational Department. The prevalence of neuralgia and toothache is exhibited in a table giving a percentage of 54·2 per cent. Toothache, however, is not separated from neuralgia, and is so common a trouble with all children, and is so indefinite a malady, that we cannot attach any importance to this element in the count brought against the London Board Schools. Besides, when present, is it not at least as likely to have been caused by sweets as by over-pressure? Dr. Browne's enquiries do not appear to have been directed to this distinction in the etiology of odontalgia. Short-sightedness was found to be present in 5·6 per cent., and exhibits a steady rise from the lowest to the highest standard, in which among the girls there was a percentage of 10·7. Here, however, the value of the table, as of so many, in this report, cannot be secured until a parallel series of observations are made upon children in regard to whom the question of over-pressure does not arise.

Before leaving the evidence collected in regard to school-children in relation to over-pressure, we cannot omit a reference to Dr. Browne's visit to his native county in Scotland, where he made similar inquiries in some of the schools on his way. Here he found a state of almost Arcadian health and happiness, which even his vocabulary fails adequately to depict. Very few suffered from headaches, only one knew what it was to be sleepless, and just one was short-sighted. Somnambulism was unknown. With very few exceptions "the children were pictures of health, sturdy, rosy, well-nourished. I looked round in vain for the sad, sickly faces to which I had become accustomed in Metropolitan schools, and saw smiles and dimples on every side." This is, no doubt, a charming picture. All, however, that it proves to our minds is the superiority of

Dumfriesshire over Middlesex,—the great inducement which it offers to immigrate rather than to emigrate. It does not touch the question of over-pressure, for it is obviously unfair to compare the children in London Board Schools with those in schools "all situated in a purely agricultural district," the children themselves being "well fed on porridge and milk as the staple articles of diet, with broth, potatoes, butter, tea, and occasionally a bit of meat or bacon, warmly clad, and much in the open and uncontaminated air," and having "comfortable homes, where they keep good hours." Where the conditions are so entirely different, how is it possible to enforce by a reference to the Dumfriesshire schools the contention that the aspect and the diseases of the London School Board children are due to over-pressure? A good cause is here injured, for the alleged diseases become explicable by environment.

It is in regard to the pupil teachers in the Board Schools in London that Dr. Browne is more successful in demonstrating the injurious influence of over-pressure. The returns refer to 388 persons, and it appears that the average time given to school service by them was nearly four hours overtime per week. A table is given showing the hours at which they leave off study on those nights when they attend "Centres," *i.e.*, schools in which the pupil teachers in certain districts meet for instruction, and from this it appears that 94 cease study at 8.30 p.m.; 26 at 9 p.m.; 81 at 9.30 p.m.; 121 at 10 p.m.; 50 at 11 p.m.; and 16 at 12 p.m. Another table shows the hours at which pupil teachers leave off study on non-centre nights, and we find as many as 56 working till midnight, 142 till 11 p.m., and 131 till 10 p.m. In addition to this, nearly one-half of the pupil teachers professed to devote more than three hours of their Saturday afternoon holiday to further study, and we fear with only too much truth. Of 416 female pupil teachers, the whole number said they were on their feet more than five hours a day, and 87 stated that they were not allowed to sit during school hours.

As might be expected, irregular and hasty meals were found to be very frequent. Out of 424, 257 asserted that this was their constant experience. Dr. Browne asked 526 pupil teachers and ex-pupil teachers to state how many pupil teachers had died, or so broken down as to have to give up their work, and 72 cases were reported to him, in which the result was attributed to the following causes: to con-

sumption in 22 cases, to brain fever in 13, to nervous exhaustion and headaches in 9, to general debility in 9, to loss of eyesight in 4, to epilepsy in 3, to insanity, heart disease, and loss of voice in 2 each, and to neuralgia, St. Vitus' dance, dyspepsia, uterine disease, and spinal curvature in 1 case each.

As to absence of work from sickness—an important point—it was found that out of 456 pupil teachers, 333 had been so absent during the previous twelve months, 62 of whom had been off work for more than a week, and 271 for more than a day. On the other hand, Mr. Fitch made enquiry at certain schools in London, having in all a staff of 220 female teachers, and found that on the day of the visit not a single head teacher, assistant, or pupil teacher was absent, and that only three had been kept away for a week in the year from over-work. It would be fairer, however to say seven, as three were detained by nervous debility and one by neuralgia, which probably arose from over-work.

Headaches were found to prevail more frequently than amongst scholars, viz., in 64·5 per cent. of the pupil teachers. Much is said in detail in regard to these headaches, but as we feel sceptical in regard to the trustworthiness of the replies, in consequence of the inevitable fallacies arising out of suggestion and leading questions, we pass over this portion of the evidence.

It is a noteworthy fact in regard to insomnia that only 24 out of 388 pupil teachers suffered from it. And here again the explanation of this unexpected result is sought in muscular exhaustion. Short-sightedness was found present in 16·7 per cent. We pass over the statistics of toothache as not convincing, although probably more reliable than in the case of children.

On the whole, we are very much inclined to believe with Dr. Browne that "only a radical change in our pupil teachers' system, a change which shall relieve pupil teachers from the excessive burdens under which they now groan, and give them leisure for thought, digestion, and recreation, can ward off so undesirable a state of affairs," namely, the evils to themselves and their children, which must inevitably follow the infraction of the physiological laws of our being.

We are led to this conclusion by what we have seen in taking part in the management of elementary schools, and by what we have observed in hospitals to which teachers

have been brought, labouring under affections of the nervous system attributed to over-work.

It might have been well, as Mr. Fitch says, had Dr. Browne referred to the exceptional character of the present system of pupil-teacherism in the London Board Schools, but we are very sure that the evils arising out of the system are, and long have been, in operation, not only in London, but the provinces.

We have seen too much of "the examination fever" to doubt its existence, although it has been more conspicuous among the head teachers, the assistants, and the pupil teachers than the scholars. Still, it is to some extent reflected upon them. Mr. Fitch is himself one of those admirable inspectors who is not only exceedingly able in the performance of his duties, but who is sympathetic with the staff and the children on examination day, so that all feel encouraged instead of frightened and disheartened by his inspection. But unfortunately all are not like him. We have known an inspector who, although painstaking and accurate, was so utterly destitute of consideration to the teachers, and of sympathy with the children, that the effect was most prejudicial to all concerned.

Objection may fairly be made to the term "over-pressure," and we should prefer that of over-work. "One naturally looks," says Mr. Fitch, "to a scientific expert to give greater exactness to the connotation of an indefinite term, to indicate at what point human effort, whether mental or physical, ceases to be legitimate and healthy, and becomes mischievous; and either to verify or correct by careful induction the loose general statements which pass current in the Press or in public meetings. But Dr. Browne does not do anyone of these things; on the contrary, he accepts anecdotes, rumours, and resolutions of local meetings, pieces them together with remarks and conjectures of his own, and then describes himself as accumulating 'evidence.'" We cannot altogether acquit the writer of this sentence from the charge of the exaggeration and rhetorical statement which he brings against Dr. Browne, for after making a liberal deduction for assertions unsupported by evidence, there remain important facts, obtained from the schools and statistical results, which cannot be disposed of without countervailing facts. Nor can we set at nought resolutions passed by teachers at public meetings, especially when it is considered that their coming forward to make complaints requires, we should

suppose, some moral courage. With a good case, it is all the more to be regretted if Dr. Browne has allowed himself to fall into any inaccuracies. The description of an ordinary day's school-work is, according to Mr. Fitch, inaccurate in every particular. "Though in all well-ordered schools the members of the staff are in their places a few minutes before the opening, work does not begin till nine. The school is dismissed at twelve, not at one. The evening class, even under the London School Board, meets only two evenings a week, and three hours of private study on the same evening are, according to Dr. Browne's own calculations, entirely unnecessary."

In conclusion, we would say that we believe that good will be done by the enquiry already instituted. "Superficial" it may have been. The number of children examined is, doubtless, infinitesimal compared with the total number. A dominant idea, to which expression had been previously given in somewhat sensational terms, may have coloured some of the observations. Still, we hold that there is substantial truth in the allegation that over-pressure exists, and to such an extent as to cause a serious evil, especially among pupil teachers, and the masters and mistresses themselves. We trust and believe that greater care will be taken in future not to force children to perform mental work beyond their capacity, that keeping-in will be rarely if ever resorted to, and that home-lessons will be sparingly enforced. We believe one great evil lies in the character of the knowledge which children in elementary schools are expected to master. With regard to payment by results, the evil effects are really not disputed, but the difficulty is to find a substitute. We hope some better means may be discovered, but the taxpayers have a right to demand that £3,000,000 of the public money shall not be paid to schools which are inefficient, and of this efficiency, what are the proper tests? Mr. Fitch has shown that mere book knowledge is not the only thing considered; and, still more, we trust, may be done in this latter direction.

Finally, we consider that service would be rendered to the interests of school children and teachers by the appointment of a Committee empowered to collect evidence on a sufficiently large scale to form a reliable basis for conclusions, and with ample allowance of time. We certainly cannot object to Mr. Fitch's demand that those who undertake such duties shall "have some perception of the true nature of

scientific inference, and will take some pains to understand the system which they propose to criticise," or, rather, to investigate. Calm investigation, conducted in a scientific spirit, with scrupulous accuracy, and with parallel tables of disease in the school and the non-school workers, might then be carried out, and the results would be proportionately trustworthy, and would command the assent of the public.

Weldon v. *Winslow.*

We refrain from offering any comment upon this trial, as it is understood that the defendant will appeal against the verdict. It is important, however, to place on record the substance of the summing up of the Judge (Mr. Justice Denman) so far as it relates to his laying down of the law, and his instructions to the jury.

QUEEN'S BENCH DIVISION OF THE HIGH COURT OF JUSTICE.

Nov. 28 and 29, 1884.

(Before Mr. Justice DENMAN and a Special Jury.)

Mr. Justice Denman, in summing up, directed the jury that all the issues raised would for the purpose of the day be ruled by whether the jury believed that the defendant had or not in the course of what he had done been actuated by some improper motive and had not acted honestly and *bonâ fide* in the performance of a duty. The burden was upon the plaintiff to prove affirmatively that the defendant had been actuated by some improper motive, or, in other words, that there was malice. There were three substantial questions which the jury would have to decide. Was the letter of the 14th of April a libel? That was, was it written in the honest and *bonâ fide* belief that Mrs. Weldon was a person in whose case proceedings ought to be taken of the character that were taken in reference to her confinement, or to supervision, or restraint of some sort; or was it written regardless of the real merits of the case as to that, and from some bye or sinister motive, such as to get her into an asylum in order to gratify the husband, or for gain or profit? Secondly, as to the letter that was published by the defendant in the "British Medical Journal," was that written in self-defence, or with the intention of further libelling the plaintiff, by calling her an insane person, with the knowledge that she was not that sort of person? And, thirdly, was the assault which was committed with the assent of Dr. Winslow when he sent persons to arrest the plaintiff committed in the *bonâ fide* belief that there was good ground for taking her to an asylum, or was it a case in which the

defendant, not honestly believing this, was anxious that she should be confined from some improper motive? These were the issues which the jury would have to decide. In case they should find for the plaintiff, he would say a word or two upon the question of damages. In a case involving malice of any sort the question of damages was one that was very much at large for the consideration of the jury. They were entitled to consider the amount of malice, the sort of malice, and the conduct of the party who charged the defendant with malice, and how far the conduct of that party might have induced the defendant to take an unfavourable view of the case; how near it was to a *bonâ fide* belief, and how far it was from a *bonâ fide* belief; everything was for the jury, and should be taken into account in case they should give a verdict for the plaintiff. There would be a disadvantage in running riot as to damages; and he was sure that the jury would not do that unless they felt that the case was one in which on public grounds they should mark their very strong sense of the wrong that was done. Their verdict must not be influenced in any way by their dislike of the lunacy laws, which gave very large powers to doctors, for it would be highly unjust to visit any individual with additional damages merely in order to express an opinion that the law should be altered. This would be very wrong indeed, and he did not think for a moment that the jury would act in that way. If the defendant had been actuated by no sinister motive, then the verdict would be for him; but if there had been an improper attempt to carry this lady into an asylum, then, of course, there must be damages for the plaintiff, and very considerable damages.

The jury said that they found a verdict for the defendant in reference to the alleged libel in the letter of the 14th April, 1878. In reference to the libel of the 8th January, 1879, in the "British Medical Journal," they found for the plaintiff, upon the ground that in it the defendant justified the proceedings taken against the plaintiff, including the assault made upon her with a view to her confinement, when from the information at his command he had ample opportunity of discovering that he was wrong. Upon this part of the case they assessed nominal damages. As to the assault, they found for the plaintiff, upon the ground that the defendant allowed himself to be unduly influenced by other motives than the interests of justice. Upon this they assessed the damages at £500.

Mr. Justice Denman upon this finding said that he should give judgment for the plaintiff, damages £500, and one shilling; but upon the application of the defendant, he said that he would stay execution.

Assault by a Patient on a Superintendent.

Dr. Murray Lindsay, the Medical Superintendent of the Derby County Asylum, was attacked in a very dangerous manner by one of the patients under his care on Nov. 25th. The man was regarded as harmless and inoffensive, and had been in the asylum twelve years. He worked in the joiner's shop, and on Dr. Lindsay entering, wounded him with a chisel in three places, causing the flow of blood in the left groin, the abdomen, and the chest near the heart. It was so quickly and quietly done that another patient at work in the room at the time, with his back towards the man, was unaware that anything had occurred, and went on with his work as usual. Dr. Lindsay, fortunately, did not faint, and, deeming it prudent to avoid a struggle, left the shop, and gave orders about the patient, who at once parted with the chisel, and, without exhibiting any agitation, walked quietly to the ward with the engineer, remarking, however, that he regretted that he had not done for the doctor, and that he would yet, if he had to wait twenty years. Dr. Lindsay was attended by Mr. Dolman, senior surgeon to the Derby Infirmary. The wounds happily proved much less dangerous than it was at first feared they would be, and no alarming symptoms have arisen.

All our readers will, we are sure, join with us in congratulating Dr. Lindsay on his escape from such an alarming attack, and rejoice that he is spared—we hope for many years—to carry on the work in which he is engaged, with so much credit to himself and advantage to the asylum.

This event raises the question of compensation for injuries to the officers of asylums, and we hope that an improvement of the present provisions of the law will be the result. We shall return to the subject in a future number.

In this instance, the occurrence cannot be adduced as an argument in support of mechanical restraint, for as the patient had been employed for years in the workshop, and had been regarded as so very inoffensive a man, he would not have been restrained in even an asylum in the Province of Quebec.

PART II.—REVIEWS.

Thirty-Eighth Report of the Commissioners in Lunacy.—17th July, 1884.

This report, which is no less voluminous than its immediate predecessors, contains a large amount of interesting and valuable material.

The total number of insane persons included in the returns to the lunacy office amounted on the 1st January, 1884, to 78,528, as compared with 76,765 on the first day of the previous year, showing an increase of 1,763, and a proportion of insane persons to population of 1 in every 345.

Of these 8,058 were of the private class and 70,470 paupers.

The private patients had increased in the year 135, and the paupers 1,628, as compared with an annual average increase in the 10 preceding years of 90 private and 1,557 pauper patients. The distribution and classification of these patients is as follows:—

Where Maintained on 1st January 1884.	Private.			Pauper.			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
In County and Borough Asylums	317	369	686	20,301	24,863	45,164	20,618	25,232	45,850
In Registered Hospitals	1,548	1,451	2,999	95	52	147	1,643	1,503	3,146
In Licensed Houses :									
Metropolitan	973	844	1,817	229	476	705	1,202	1,320	2,522
Provincial	710	854	1,564	249	444	693	959	1,298	2,257
In Naval and Military Hospitals, and Royal India Asylum ...	295	19	314	...	...	...	295	19	314
In Criminal Lunatic Asylum (Broadmoor)	163	66	229	229	77	306	392	143	535
In Workhouses :									
Ordinary Workhouses	...	...	...	5,107	6,949	12,056	5,107	6,949	12,056
Metropolitan District Asylums	...	...	...	2,461	2,860	5,321	2,461	2,860	5,321
Private Single Patients	180	269	449	...	...	...	180	269	449
Out-door Paupers	...	...	...	2,333	3,745	6,078	2,333	3,745	6,078
Total	4,186	3,872	8,058	31,004	39,466	70,470	35,190	43,338	78,528

The private patients have increased in county and borough asylums by 32, in registered Hospitals by 128,

and at Broadmoor by 11, but they have decreased in licensed houses by 23, in naval and military hospitals by 12, and as single patients by 1. The pauper patients have increased in county and borough asylums by 1,753, in licensed houses by 4, at Broadmoor by 11, and in the Metropolitan District Asylum by 215. This class has, however, decreased in registered hospitals by 10, in ordinary workhouses by 168, and as out-door paupers by 177.

As we have frequently pointed out before, the statistics of relative increase in private and pauper patients are probably entirely misleading, the pauperizing influence of insanity in persons, especially of the lower middle class, causing numbers of them to gravitate to the pauper asylums and to be included in the list of pauper lunatics.

The proportion of paupers to population still goes on steadily decreasing, so as to be little more than half what it was 20 years since, but the percentage of pauper lunatics to paupers has increased almost threefold in the same time, and shows, and is likely to show, no sign of abatement. While the decreasing pauperism, and the accumulation from various causes of pauper lunatics, are producing these results, it is the opinion of the Commissioners, as a necessary deduction from their statistics, that there is no appreciable increase in occurring insanity, and that there has been none during the last 8 years.

There was an apparent increase in the year under review, but this arose mainly from the unaccountable, and apparently unnecessary and unwise, transference of a large number of chronic imbeciles from the workhouses to asylums in Lancashire.

The Commissioners say, "The proportion of persons annually attacked with insanity and actually placed in asylums and kindred institutions had not risen perceptibly from 1875 to 1882, at which latter date the annual proportion of fresh cases was 5·15 per 10,000; but for 1883 there is an advance in the new admissions to 5·41 per 10,000 of the population."

This advance is in a great measure due to exceptional and local conditions, particularly to the admission into the Lancashire asylums of a large number of imbeciles and chronic lunatics, previously under care in workhouse wards, and therefore not fresh cases of insanity.

"The average annual admissions into the Lancashire asylums for the four years 1879 to 1882 inclusive (excluding

transfers) were 1,192, whereas for 1883 the total admissions were 1,860, an excess of 668 over the average. If this number (668) be deducted from the total number of admissions into all asylums during the year, it brings the ratio of total first admissions in 1883 down to 5·15 per 10,000 of the population, which is the same as for 1882.

"The large annual addition to the number of insane persons under care has produced, in some quarters, an impression that insanity itself is much on the increase. On examination, however, of the figures now under consideration, it will be found that the increase is almost entirely due to accumulation of chronic cases of the pauper class, so that the community at large would not appear more liable than formerly to be attacked with insanity. This should tend to allay public anxiety; but those to whom the law has entrusted the responsibility, should not disregard the imperative necessity of making the accommodation for such additional and accumulated cases keep pace with the requirements of their respective districts."

The increase in the percentage of patients in asylums, as compared with those in workhouses and private dwellings, to which reference was made in our notice of last year's report, has continued, and the proportions in comparison with those at previous periods are as follows:—

	In Asylums.	In Workhouses.	With Relatives, &c.
1873	59·81	26·32	13·27
1883	65·74	25·17	9·09
1884	66·72	24·66	8·62

These figures, although they show that public confidence in asylum care is increasing, also point to an increasing absence in workhouses of suitable provision for the cheap maintenance of persons for whom such provision should, in the interest of public economy, be made, as well as the continuously augmenting influence of the mistaken 4s. grant, to which attention has already so frequently been directed.

The number of patients admitted into the several classes of asylums and into private care during the year under review was 16,000, of whom 1,319 were transfers. The recoveries were 5,574, and the deaths 5,135.

Excluding transfers and the admissions into idiot asylums, the percentage of stated recoveries to admissions was, for men 34·79, for women 42·00; total 38·50, as compared with an average during the last 10 years of 39·38. The percentage of deaths to the average number resident was 11·67

for men, 7·60 for women; total, 9·47, as compared with the average for the previous 10 years of 9·91.

The elaborate series of tables, which form so valuable a part of the Commissioners' report, tell us that 67·4 per cent. of the non-congenital patients admitted into asylums in 1883 were the subjects of first attacks of insanity; that 9·4 per cent. of the whole of the admissions were epileptics, and 8·0 per cent. general paralytics; that the epileptic paupers exceeded the private patients threefold, and the pauper general paralytics those of the private class by one-fourth; and that 28·6 per cent. of the patients admitted were credited with a suicidal propensity.

4,128 patients stated to have a suicidal tendency and 1,359 epileptics were admitted into asylums during 1883, to swell the very large numbers already under care; but only 21 of the former succeeded in committing suicide, while 11 of the latter were believed to have died from suffocation in epileptic fits.

These figures show that, however possible it may be to take greater precautions against these accidents, those which are already in force are attended by remarkable success.

The Commissioners report with much satisfaction a considerable increase in the proportion of post-mortem examinations to the total number of deaths. Nearly 69 per cent. of the deaths have been thus verified, a matter which the Commissioners consider reflects great credit upon the Medical Superintendents of asylums as a body.

We repeat, on page 579, our table of last year showing the assigned causes of insanity in three classes of patients.

In the following table are shown the proportion per cent. of recoveries and deaths in the several classes of asylums and in private care, transfers and admissions into idiot asylums having been omitted:—

	Proportion per cent. of Recoveries to Admissions.			Proportion per cent. of Deaths to the Average Numbers Resident.		
	M.	F.	T.	M.	F.	T.
County and Borough Asylums ...	35·28	42·20	38·88	12·40	7·76	9·85
Registered Hospitals	38·56	45·70	42·56	11·07	5·14	7·76
Metropolitan Licensed Houses ...	27·75	38·60	33·25	11·00	6·34	8·48
Provincial Licensed Houses	28·42	43·89	37·31	10·29	9·56	9·86
Private Single Patients	6·25	20·31	14·28	7·47	7·77	7·66

CAUSES OF INSANITY.	Proportion [per cent.] to the Total Number of Patients in each Class Admitted.						Ditto to Number of General Paralytics Admitted.		
	PRIVATE.			PAUPER.					
	M.	F.	T.	M.	F.	T.	M.	F.	T.
MORAL:									
Domestic Trouble (including loss of relatives and friends) ...	4·4	11·8	7·8	3·7	10·0	7·0	4·1	10·7	5·5
Adverse Circumstances (including business anxieties and pecuniary difficulties)... ...	8·4	2·7	5·7	7·2	4·0	5·5	9·6	5·8	8·8
Mental Anxiety and "Worry" (not included under the above two heads), and Overwork ...	16·6	9·0	13·1	4·8	5·3	5·0	7·4	4·5	6·8
Religious Excitement	2·0	4·8	3·3	3·2	2·8	3·0	·9	1·2	·9
Love Affairs (including Seduction)	1·0	4·3	2·6	·8	2·4	1·6	·8	1·2	·9
Fright and Nervous Shock ...	·8	1·8	1·3	1·1	1·7	1·4	·8	·8	·8
PHYSICAL:									
Intemperance, in Drink... ...	17·0	6·8	12·2	20·2	6·3	12·9	23·3	11·6	20·9
,, Sexual	1·8	·3	1·1	·6	·5	·5	2·4	4·1	2·8
Venereal Disease	·7	·1	·4	·5	·2	·3	1·2	·4	1·0
Self-abuse (Sexual)	3·7	·9	2·4	1·8	·1	·9	·2	...	·2
Over-exertion	1·2	·2	·7	·5	·5	·5	1·5	1·7	1·5
Sunstroke	1·6	·2	·9	2·0	·2	1·1	2·6	·8	2·2
Accident or Injury	4·1	1·2	2·7	5·9	1·1	3 4	9·3	3·3	8·0
Pregnancy	...	·5	·2	...	·7	·4	...	...	...
Parturition, and the Puerperal State	...	7·4	3·4	...	6·4	3·3	...	2·5	·5
Lactation	...	·8	·4	...	2·4	1·2	...	·4	·1
Uterine and Ovarian Disorders	...	6·0	2·8	...	1·8	·9	...	2·1	·4
Puberty	·2	·1	·1	·2	·5	·4	...	...	...
Change of Life	...	7·3	3·4	...	3·4	1·8	...	4·5	·9
Fevers	1·3	·4	·9	·6	·4	·5	·2	...	·2
Privation and Starvation ...	...	·2	·1	1·4	2·4	1·9	·7	4·1	1·4
Old Age	2·2	3·4	2·7	3·7	4·8	4·3	·1	...	·1
Other Bodily Diseases or Disorders	9·4	10·1	9·7	11·4	10·2	10·8	10·6	11·2	10·7
Previous Attacks	13·5	16·1	14·7	14·3	19·6	17·0	3·9	6·2	4·4
Hereditary Influence ascertained	23·2	26·1	24·5	18·5	21·3	19·9	15·5	20·2	16·5
Congenital Defect ascertained...	8·0	1·8	5·1	4·5	3·5	4·0	...	·8	·2
Other ascertained causes ...	7·6	2·9	5·4	1·9	·8	1·3	1·4	...	1·1
Unknown	12·1	12·0	12·0	24·0	22·2	23·1	32·2	33·9	32·6

The following table, from which transfers and the admissions into idiot asylums have been excluded, has an interesting bearing upon the questions whether insanity is becoming more or less curable, and whether the crowding together of large masses of lunatics is producing a gradually increasing or a gradually decreasing recovery rate, or having no appreciable effect :—

Year.	Number of stated Recoveries to 100 Admissions.															Total (excluding Idiot Establishments).		
	County and Borough Asylums.			Registered Hospitals (excluding Idiot Establishments).			Metropolitan Licensed Houses (excluding Idiot Establishments).			Provincial Licensed Houses (excluding Idiot Establishments).			Private Single Patients.					
	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.
1874	36·29	47·45	41·78	39·16	58·59	49·24	28·24	33·89	31·35	31·06	32·77	32·07	12·76	20·58	17·39	35·85	45·21	40·53
1875	35·71	42·92	39·32	43·30	52·84	48·51	32·07	36·58	34·59	33·11	47·64	41·12	19·51	8·82	12·84	36·10	42·77	39·44
1876	36·55	44·63	40·60	40·55	48·21	44·75	26·25	34·60	31·06	33·90	37·39	35·79	16·00	19·23	17·96	36·12	43·18	39·69
1877	33·62	40·87	37·29	30·17	51·85	41·05	28·57	41·53	35·36	27·89	41·59	34·63	11·62	14·81	13·70	33·39	41·25	37·30
1878	35·33	45·26	40·38	45·14	54·33	50·14	29·61	26·51	28·00	34·31	44·23	39·05	9·83	19·71	15·15	36·02	43·85	39·94
1879	37·46	43·95	40·85	42·56	57·72	51·23	28·73	37·55	33·40	29·64	35·62	32·50	27·65	16·17	20·86	37·25	43·54	40·50
1880	37·74	43·81	40·88	35·64	54·32	46·45	31·66	35·48	33·88	34·96	37·46	36·39	10·00	28·00	20·80	37·06	43·28	40·29
1881	35·21	44·85	40·13	40·20	57·02	49·54	28·94	42·94	36·34	25·66	35·90	31·52	19·56	13·23	15·78	34·85	44·46	39·72
1882	36·18	44·53	40·41	41·34	46·85	44·66	25·11	37·17	31·21	27·94	36·56	33·37	19·44	15·71	16·98	35·39	43·27	39·41
1883	35·28	42·20	38·88	38·56	45·70	42·56	27·75	38·60	33·25	28·42	43·89	37·31	6·25	20·31	14·28	34·79	42·00	38·50
Av'ges.	35·94	44·05	40·05	39·66	52·74	46·81	28·69	36·48	32·84	30·69	39·30	35·37	15·26	17·66	16·57	35·68	43·28	39·53

We again record the percentages of patients admitted into asylums in whom there was epilepsy or general paralysis.

Year.	Epileptics.						General Paralytics.					
	Private			Pauper.			Private.			Pauper.		
1878	7·7	2·8	5·6	12·3	8·6	10·4	11·1	0·8	6·5	14·4	3·7	9·0
1879	7·9	3·5	5·9	12·1	8·0	10·0	8·8	1·0	5·2	13·6	3·6	8·4
1880	6·0	3·4	4·7	11·1	8·0	9·5	7·9	2·2	5·1	12·5	3·5	7·7
1881	5·4	3·6	4·5	11·9	8·3	10·1	9·4	2·0	5·9	12·4	3·3	7·7
1882	5·2	2·8	4·0	12·5	8·1	10·2	10·9	1·4	6·3	14·4	3·6	8·9
1883	4·9	2·8	3·9	12·4	8·6	10·4	10·2	1·7	6·2	13·7	3·5	8·3

The Commissioners continue to report additions to county and other asylums throughout the country, and in some instances a failure to provide the accommodation which has for some time been known to be required, whereby serious injury in inflicted upon the ratepayers, the patients, and their friends.

They also give a list of the casualties which have occurred during the year.

Under the head of licensed houses they make the following remarks, which are interesting in their relation to recent discussions and approaching legislation :—

"The statutory visits have been regularly made by us to all these establishments, and we can report that on the whole they continue to be well managed.

"No cases of anything approaching to illegal detention have come under our notice, nor have we had occasion to investigate any serious charges of ill-treatment of patients by attendants in licensed houses.

"While saying this, it must not be thought that we are not fully alive to the fact that the insane are exposed (though certainly not more in licensed houses than in public asylums and lunatic hospitals) to rough usage and unkind treatment at the hands of those to whom their immediate care is confided. Against this evil one great safeguard is the exercise of extreme care in the selection of attendants, a matter rendered more easy by attracting a superior class by liberal wages and considerate

treatment, and, above all, by the constant personal supervision of these by employers themselves. Towards this end we have consistently worked, and, though by no means content, we think it safe to conclude from our own observations, and from the comparatively small number, of late years, of established cases of brutality or ill-usage, or of suspicious cases not admitting of proof, that decided improvement in the treatment of the insane by their attendants, as well in licensed houses as elsewhere, has been effected."

The average cost of maintenance in county and borough asylums during the year under review was as follows :—

	s.	d.
In County Asylums	9	$2\frac{3}{4}$
In Borough Asylums	10	$4\frac{7}{8}$
In both taken together	9	$5\frac{1}{4}$

showing a decrease of $\frac{7}{8}$d. upon the previous year.

The report enters at length into the details of the fatal fire at Southall Park, and publishes a code of suggestions which has been issued to superintendents and proprietors, which may be very serviceably reproduced here :—

"General Suggestions applicable to Lunatic Asylums, Hospitals, and Licensed Houses, as to the Precautions to be taken against Danger from Fire.

"Three objects must be kept in view :—

"1. The prevention of fire.

"2. The safety of the patients in the event of an outbreak.

"3. Extinguishing the fire, and saving the building and property.

"Of these the two first are of paramount importance.

"1. As regards the prevention of fire.

"The utmost caution in the use, by attendants, servants, and others, of fires, lights, and matches should be inculcated; the position and safety of gas-brackets, stoves, &c., should be considered, and, where necessary, altered and improved; the condition of chimney flues and hearths examined and made safe; and a careful and frequent supervision of all these matters exercised by some person in authority.

"A careful examination of all the premises should be made nightly by a trustworthy person after the hour of retiring to bed.

"In all Licensed Houses, except a few in which the number of patients is very small, and in all County and Borough Asylums and Hospitals, a night patrol, or more than one

when requisite, should be established, with mechanical means for testing vigilance. The patrol should have the chief duty of watching for indications of fire, and giving the alarm should any be discovered.

"An adequate staff of attendants should sleep at night in the wards, or in close proximity to the sleeping rooms of patients.

"2. As regards the means of securing the safety of patients in the event of an outbreak of fire.

"Ample means of escape, especially from the upper floors of buildings, must be provided. Every floor on which patients sleep should have two staircases for exit, so placed that one at least would be in all probability available in case of a fire. Where staircases are insufficient, others should be constructed, internal where possible, otherwise external. In addition, escapes of some approved form should be provided, and windows should be adapted to their use. Doors of sleeping rooms should be so secured as to be readily opened from the outside.

"3. As regards the extinction of fire.

"This must be a secondary object, except when the fire is discovered at its first beginning, in which case, with means immediately at hand, it may be possible at once to extinguish it, and so ensure the patients' safety.

"Nevertheless sufficient apparatus should be provided, having regard to the public means for extinguishing fire existing in the neighbourhood, and particularly some means of dealing with a fire in its early stages. Such means are hydrants, hand-pumps, 'extincteurs,' fire buckets kept constantly filled with water, &c. Where there are hydrants, proper lengths of hose, nozzles, and spanners should be kept in close proximity to them, and frequently examined as to their condition. Care must be taken to secure an ample supply of water.

"It is of vital importance to the safety of the patients that attendants and others in Asylums, Hospitals and Licensed Houses should be carefully instructed and practised in the duties which would devolve upon them in case of fire. For this purpose a code of regulations, which must necessarily vary in different establishments, should be drawn up and printed, and all attendants, male and female, and other persons engaged on the premises, should be required to make themselves fully acquainted therewith. In such instructions the steps to be taken, first, for securing the safety of the

patients, secondly, for extinguishing the fire, should be clearly indicated, and specific duties should, as far as possible, be assigned to specified individuals. Copies of the code should be hung up in conspicuous positions, and distributed to the officers and servants.

"In all establishments means, electric or other, should be provided for conveying the alarm of fire, arousing the inmates and neighbours, and summoning public assistance.

"The various apparatus provided should be frequently tested to ensure its efficiency, and attendants and others should be thoroughly instructed and practised in its use."

The Commissioners thus describe their action with reference to the statutory "statement:—"

"At some Asylums a practice had arisen under which the important duty of examining each patient, and reporting to us on his condition of mind and body soon after admission, was occasionally, or indeed always delegated to an assistant medical officer, instead of being performed by the Medical Superintendent himself.

"Finding some doubts as to the Construction of Section 55 of the Act 16 & 17 Vict. c. 97, which imposes on 'the Medical Officer' this among other duties, we laid a case in March last before the Law Officers of the Crown, and their opinion is as follows:—

"Opinion of the Attorney and Solicitor-General on the construction of the Act 16 & 17 Vict. c. 97.

"1. The Medical Officer mentioned in the different sections of the Act appears to refer to 'the Medical Officer' appointed as such by name under Section 55. He is not more or less 'the Medical Officer' because he is also appointed Superintendent. If there be a Medical Officer appointed to different divisions, they can act as 'Medical Officer' in respect of the division to which either of them is respectively appointed.

"2. Assistant Medical Officers are not Medical Officers within the Act. They cannot perform any discretionary duty imposed upon the Medical Officer, nor sign any document which has to be signed by him; but they may make entries under the direction of the Medical Officers.

"(Signed) "HENRY JAMES.
"Royal Courts of Justice, "FARRER HERSCHELL.
"14 March, 1883."

Twenty-sixth Annual Report of the General Board of Commissioners in Lunacy for Scotland: Edinburgh, 1884.

The Report of the Scotch Lunacy Commissioners for 1883 is, as usual, distinguished for minuteness, and a kindly sort of prolixity which is not altogether out of keeping with the personal attention to details for which that Board has long been noted.

There were on the 1st of January, 1884, 10,511 insane persons in Scotland, known as such to the Board, and there seem, in addition, to have been 228 imbeciles who were inmates of training schools under the jurisdiction of the Board. 8,572 patients were accommodated in public and private asylums, lunatic wards, and in the lunatic department of the Perth Prison, leaving 1,939 in "private dwellings." Of these last, 128, 48 males and 80 females, were private patients, and 1,811, 720 males and 1,091 females, were pauper. During the year 1883, there had been 1,220 discharged *recovered*, 604 discharged not recovered, and 697 deaths. The percentage of recoveries on the admissions, of all classes, except those sent to the prison, seems to have averaged 27, from 43 in the public and parochial asylums, to 11 in the private. The deaths represent a percentage of 7·4 in the same classes, from 5·2 in "lunatic wards" to 10 in the private asylums.

The Board makes some remarks on the subject of what are called in Scotland "certificates of emergency." In that country, as is well known, no patient, private or pauper, can be received into an asylum (except as a voluntary patient) without a Sheriff's order, and this is granted on the presentation of a petition accompanied by two medical certificates. This must prove extremely cumbersome in practice, for patients do not always go insane while the Sheriff is sitting, and even if they did they might be at some distance from one. That it is cumbersome is practically proved by the fact that the "certificate of emergency" is very frequently resorted to. Under this certificate, signed by a medical man, and generally by one of those signing the other certificates in the case, a patient can be received and detained for three days, and during that time the Sheriff's order may be procured. It may possibly happen that the Sheriff declines to sign the order, or that the patient recovers within the three days, or that for some other reason he is discharged without an order having been procured; and, with the view of ascertaining whether in such circumstances the patient had had

reason to complain of the deprivation of his liberty on such terms, the Commissioners "had an examination made for the years 1880, 1881, 1882," during which time there were 67 such cases, with the result of showing that no injustice had been done to anyone.

It has been proposed to meet popular clamour in England by copying the Scotch law in these particulars, as regards private patients. We have not the slightest faith in the order of the Sheriff. It is a complete farce, for he never, we believe, sees the patient. At any rate he is not obliged to. Nothing, however, can be more ingenious, for it relieves doctors and friends alike of responsibility, and acts on the public mind as a convenient opiate. It may, therefore, be introduced into England as a *placebo,* and to satisfy those whimsical people who fancy that anything must be good so long as it is imported from the other side of the Tweed.

Changes in the English lunacy statutes will very possibly soon be made, and though it is not likely that, be the change what it may, there will be much real improvement, a modification of the English system can be made in this direction as well as in any other. We need not expect the public to look at the nice and delicate points of the question; all they think of is this: under any Lunacy Act you must deprive a man of his liberty, and we intend to see that the dangers of such a system are minimised as much as possible. It is no doubt well for those who have the care of the insane, such as those whom we more directly address, to recognise the existence of this sentiment, to meet it and aid in guiding it into those channels by which the most good and the least ill to the insane may be secured. They may depend upon it that they will not be able to check the current altogether, however unreasonable it may be. It is said that actions at law for improperly confining a patient in an asylum are extremely rare, if not unknown, in Scotland, and this does not arise from any special care on the part of the doctors, or from want of boldness in certifying the more obscure and doubtful cases, such as those of dipsomania, but from the fancied security given by the order of the Sheriff.

With reference to the changes amongst the attendants, the Commissioners state that there have been no less than 603. They do not state how many of these servants there are in the Scottish asylums, but we can get an approximation to the number. There were 8,519 patients in all the asylums and poorhouse lunatic wards on the 1st of January, 1884, and it

is on the whole probable that there are in all 10 patients to 1 attendant. This gives 852 attendants for the asylums, &c., of Scotland, and if so the proportion of changes is very startling. It must be borne in mind that of the supposed 852, 603 were not necessarily new to the work on the 1st of January, 1884, because it is probable that the total of changes is made up of a comparatively small class. Thus, an asylum with 6 attendants for instance, might have 12 changes in one year, at one per month, and still have retained the services of 5 old servants. But, with every favourable explanation, such an evidence of a desire to quit the Scottish asylum service is worthy of a careful inquiry into the cause. It will probably be found to be, at any rate, partly due to the fact that these asylums have no powers of granting pensions whether for long service, ill-health, or injury contracted in the service. We can speak from personal experience of the additional attractiveness given to asylum employment in England, where an attendant gets a pension. But whatever be the cause, a suitable remedy should be discovered and applied, for nothing is more detrimental to asylum management than a constant change of servants.

The Board has a good deal to say of the "present condition of establishments," but much of what they say is only a repetition, frequently in the same words, of the entry made by the Visiting Commissioner at his statutory visit, and the impression given of extending this portion of the report unnecessarily would be removed were the practice relinquished in future. Thus, of the Banff District Asylum it is said, in the report, that the patients "have good food, good clothing, comfortable beds, abundant open-air exercise, and the means of healthy action and useful work; they are treated with skill and kindness, are not subjected to irksome discipline, and they live in bright, cheerful, and well-furnished wards." Turning to the entry, we find:—"The patients are well fed and well clothed; they have comfortable beds; they have abundant exercise in the open-air; a large number of them engage in active, healthy, and useful work; they are treated with kindness, and are not subjected to any irksome discipline; and the wards are well furnished, and have a bright and cheerful look." This repetition is objectionable, but, if it be necessary, we would suggest that the passages should in future be placed in the report within inverted commas. In connection with one of the Banff asylums, we note that it is called a "Succursal" asylum.

This word, evidently used instead of "auxiliary," is suggestive of, and renders it difficult to repress, a malediction.

The chief interest of the Scotch Lunacy Report has, for many years, centred in the remarks the Commissioners have to make on the subject of lunatics in private dwellings. Aided by the natural advantages of a country which, in many districts, is sparingly populated, the people of these districts being strange to town life, and retaining many primitive customs, they have utilized these and other forces to excellent purpose, and the result is a system of boarding-out lunatics which, though not without its inevitable evils, has its advantages. In the more crowded England, with its busy centres, and far and wide-spreading feeders of those centres, such a system on a proportionate scale would be impossible, and its establishment has not been attempted. Of the 10,511 insane persons in Scotland on the 1st of January, no less than 1,939, or nearly 20 per cent., were accommodated in "private dwellings." These are startling and interesting figures, and if they be supported by the fact that these persons are in every way as well provided for as they would be, were they aggregated together in one kind of establishment or another, their importance could hardly be over-estimated.

It is matter for regret that Dr. Fraser does not confine himself to a record of the excellent work done by him, and leave the conclusions to others. His work must take up a great deal of time, and involve much expenditure of energy, for he paid no less than 1,306 visits during the year. A simple account of where he went and what he saw would be sufficiently interesting, and more in keeping with the proper style of a formal report.

Dr. Lawson, the other Deputy-Commissioner, writes thus:—"During the course of my visitation I am frequently asked—'Can lunatics be properly dealt with in private dwellings?' One who was inclined to advocate as a partizan the system of dealing with the insane otherwise than in asylums might, with a certain amount of fitness, meet this inquiry by proposing the corresponding question—'Can the insane be properly dealt with in lunatic asylums?' At first sight the question appears to be absurd," and so on; and Dr. Lawson concludes that asylums "*apart from their resources*, are absolutely prejudicial to the interests of the acute lunatic." "The acute lunatic, *whose friends could place at his disposal the especial skill, appliances, and organisation which*

are the real advantages of an asylum, transferring them for the occasion to the patient's private dwelling, would place him under the most favourable conditions for being cured." We give these two sentences as passages which are so completely qualifying as to render them substantially an argument against his proposition. And what, may we ask, is the grammatical position of "the acute lunatic?"

We think that in the following paragraphs Dr. Lawson practically ends by admitting what he begins by denying:—

"Evidently then, so far as the curing of insanity is concerned, lunatic asylums are not unexceptionable institutions. They are only a necessary evil for which there is as yet no practicable substitute. Both the separation and the aggregation which they involve are disadvantageous. It is one of the most afflicting features of insanity that to all except the very wealthy it involves a violent and sometimes a permanent disturbance of domestic relationships. Even the pauper can wait for the issue of his simple bodily disease on his own hearth, or in his own bed. He has the companionship of his own little society and it has the pleasure of his company, which is often none the less valuable to them or valued by them on account of the softening effects of sickness. On the other hand, there is often an inherent necessity in disease of the brain and derangement of the mind, for the removal of the victim from the family circle. Other maladies may simply destroy or impair a man's usefulness; insanity may make him a positive enemy to society. Unless he is very wealthy, he cannot be treated in isolation, and an asylum is the only alternative. Insanity is the leprosy which takes him without the camp. Undoubtedly insanity has an additional horror in thus being a double affliction—a terrible malady and a domestic disruption. Yet, it is almost impossible that it can ever be otherwise than that, in the vast majority of acute cases, treatment in an asylum will be a painful necessity. Practically, efficiency in management and treatment can be arrived at only by the aggregation of lunatics. This, however, is an argument in favour not of asylums but of efficiency, as we submit to the disadvantages of aggregation in order to secure the advantages of efficiency.

"When, therefore, we ask whether acute cases can be properly dealt with in private dwellings, we are in a position to answer, that only the want of abundant means prevents their being so dealt with, and that, that obstacle being removed, no method of treatment is more likely to be satis-

factory. When again, the same question is asked regarding asylums, the answer is unavoidable, that there is much in the nature of an asylum which makes it unsuitable for the treatment of acute insanity, and that whatever improvement is made in our method of dealing with the acutely insane, must be in the direction of keeping the individual who has just become mad away from the society of those who are already confirmed lunatics, as long as it is possible to do so. This can be effected only by the treatment in cottages or other isolated dwellings of all recent cases which may be judged to be curable. Till such a method of treatment is made possible, the vast majority of the acutely insane must be dealt with in asylums; and there they should be sent without a moment's delay."

Practically, then, the question is answered in favour of asylums, and against the private dwelling system, so far as Dr. Lawson's arguments affect pauper maniacs. He seems to have quite lost sight of the fact that a thing must be possible in practice as well as good in theory. The reason of the institution of asylums is just the very reason that he gives why acute cases cannot be properly dealt with in private dwellings, namely, the "want of abundant means;" and this is so obvious, and so universally acknowledged, that we wonder it should have been thought worth while to publish such arguments over again. The climate of Madeira, for instance, is believed to be of much benefit to the phthisical, and that of many parts of Britain is extremely inimical to them; but that would not be a good reason for devoting several pages of a Blue Book to amplifying this statement, and arriving in the end at the conclusion that until the obstacle of the want of abundant means can be removed, we must cease to wish to be able to deport all the phthisical poor to that island, but instead of that do the best we can for them at home. No one will deny that there are serious disadvantages to contend with in asylum treatment. To our own mind, living as we have done for many years amongst the insane, and endeavouring to the best of our own poor ability to ascertain their wants and to lighten their annoyances, none of the latter has ever appeared to us more grievous to bear on their part, and more difficult to combat on ours, than absence of stillness at night. But what can be done in such a case? Abolish the asylum? Surely not.

In connection with this subject it is interesting to refer to the table giving the cost of pauper patients in asylums,

and in private dwellings, and to the causes of death under the different systems. In the asylums the average cost appears to have been 1s. 5¼d. per day, or 10s. 0¾d. per week per head, and in the private dwellings 9½d. per day, or 5s. 6½d. per week. It is not specified whether this sum of 5s. 6½d. includes the cost of lodging as well as of maintenance, but from a table given by Dr. Lawson at page 148, we are induced to believe that it does. Table XXII. gives the specified causes of death in establishments, but not those in private dwellings, and why this should be we are quite unable to nnderstand. We are, however, able to draw some comparison between the two systems by the help of a table by Dr. Fraser at page 132, giving the causes of death in the asylums for *twenty-five* years, and in the private dwellings for *three* years, a rather remarkable mode of comparison, by the way. The deaths in the asylums were due to the causes usual in such institutions, and in the private dwellings they were due to precisely the same series of causes, except that there was none from general paralysis. That is to say, cases of maniacal and melancholic exhaustion, of paralysis, of fever, dysentery, phthisis, and of organic diseases of the brain, such as tumours, were treated to the end in these places, at an average cost of say 4s. per week, which is probably all that is left out of 5s. 6½d. for maintenance after the rent, coal, lighting and clothing have been paid for. Asylums may be "not unexceptionable institutions," but, on the other hand, it is not pleasant to dwell on the contemplation of the treatment of a case of dysentery, or of fever, or of maniacal exhaustion, at an outlay of 4s. per week.

It is much to be regretted that these reports of the Deputy-Commissioners should become Essays, and partisan Essays too, and we have criticised them more minutely than usual, but with no unfriendly feeling towards the system which they are defending (so long as it is applied with great care to the proper cases), in the hope that these remarks may induce them to adopt a more judicial and impartial style in future. We have watched the growth of the Private Dwelling scheme with great and increasing interest. The conditions which exist in Scotland are favourable to its being tried on an extensive scale, and the Scotch Commissioners have not failed to take advantage of this, and for doing so they are to be commended. We consider that by their praiseworthy efforts and indefatigable exertions many lunatics are suitably provided for at a cheap rate, who in a more densely popu-

lated country would have to be sent to an asylum. But the system is quite strong enough to speak for itself without there being any necessity for surrounding it with a torrent of arguments which might be as readily used for swamping as for irrigating it, and it is weakened by an attempt to advocate its extension to totally unsuitable cases.

Thirty-third Report of Inspectors of Irish Asylums. 1884.

The Annual Report of the Inspectors of Irish Lunatic Asylums commences by stating that, from some unexplained reason, they are unable to publish the "more elaborate tables," given for the first time in their last report. On comparing their Blue Book for this year with that of last the following statistics will be found omitted:—

Tables showing the percentage of Recoveries and Deaths.
,, showing the Form of Mental Disease.
,, showing the Causes of Insanity of those admitted into District Asylums.

That these statistics are of great importance in the study of psychology must be admitted. Especially it is to be regretted that the attempt made to introduce one uniform system of tabulating the different causes of insanity should have been thus early laid aside. Any attempt to elucidate the origin of mental disease must be a matter of interest not alone to those engaged in the care of the insane, but to those occupied in the preservation of the public health, and even to those who contribute to the public taxes.

For years past this Journal has pointed out the importance of the publication of statistics on Insanity in the three divisions of the United Kingdom, which might supply dates for the future comparison of the ever-changing phases of Insanity. Even should these statistics at first be of doubtful value from the difficulty of obtaining authentic information, nevertheless the very habit of compiling them from year to year must of necessity cause greater care to be taken in acquiring the knowledge necessary for this publication. The Blue Books published in the three divisions of the United Kingdom contain a vast mass of facts on the subject of insanity. If the statistics thus obtained from the various institutions for the treatment of the insane could be produced in forms admitting of comparison, surely a step would be made in the advancement of science. Much has been done in the English and Scotch reports to further the study of psychology and medicine; there surely can be no reason, either from expense or trouble, why Ireland should not follow the same good example.

At the end of the years 1882 and 1883 the numbers of insane in Ireland under supervision were as follows :—

	1883.	1884.
In District Asylums on January 1st.	9,271	9,542
" Criminal " "	173	172
" Stewart Inst. (Gov. Patients) ...	16	12
" Private	651	636
" Workhouses	3,711	3,726
Total	13,822	14,088

The increase in District Asylums amounts to 271. The increase during the same time in English County Asylums has been 1,753, and in Scotch Royal and Parochial Asylums 58.

The total increase of the insane under supervision has been 266—that for 1882 being 377. No evidence would appear to exist from these returns that any increase had taken place in the ratio of the insane to the population. A certain addition of the number under supervision will of necessity take place from year to year owing to the numerous cases of mental fatuity and old age which are drafted into asylums, there to finish their career.

According to the Inspectors, the proportion under treatment in district asylums was about one to every 540 of the general population, the males exceeding females by about 18 per cent. The number of recoveries, amounting to 1,079, gave a percentage of 40 on the admissions. The Inspectors seem, however, still determined to hold to their own view, that this percentage is more legitimately calculated on the daily average under treatment. This they gave as fully 11 per cent. The discharged relieved, or actually benefited, 372, in like manner gives a percentage of $3\frac{4}{5}$ per cent. ; both together a percentage of 15 per cent. It is, however, a difficult matter to understand how the Inspectors can group the Recovered and Relieved together, as the latter involve such very different results. An epileptic may be discharged relieved, who has recovered from an attack of excitement—a maniac may have passed into a state of quiet dementia and be given to his friends, but it can only throw doubt on the statistics of insanity to lead it to be supposed by the general public that cases discharged relieved are, as a general rule, curable.

The mortality was one degree higher than in 1882. It included five cases of suicide. "In each an exculpatory verdict on a coroner's inquest was returned."

The sanitary condition of all the district asylums is spoken of in the highest terms, having been particularly exempt from epidemics and diseases of an acute character, deaths in them in almost all cases being referable to advanced age or to pre-existing debility of constitution.

The Government Auditors were stated to have reported favourably on the mode in which the various books pertaining to expenditure

were kept. In one case, however, the Auditor disallowed the outlay of £33 for a lift supplied for the use of a Medical Superintendent in one of the district asylums. It seems hard to understand how a medical man, in charge of a large institution, should be denied even the means of supplying himself with food.

It is gratifying, however, on the other hand, to find in the next paragraph that the practical efficiency of district asylums in Ireland has been sustained by a cordial co-operation between Boards of Governors and their staffs—that resident and extern medical officers have been sedulous in the discharge of their duties—that there is a general absence of complaints against subordinate servants and attendants, and almost no instance of any on the score of harshness or immorality.

This is certainly a most gratifying and happy condition of affairs to all concerned in the management of Irish asylums. But perhaps we might suggest that the Inspectors should consider that this state of things is not quite in accordance with the result of experience elsewhere; that there may be no complaints, and that quietude may have been made and called peace, which may hide a very bad state of affairs behind; that perhaps, if discipline were a little more severe, if a more careful watch were kept, the rosy hue of the existence of the insane in Ireland might not look quite so bright.

But what appears more extraordinary is that these immaculate attendants, against whom no complaint is found, are under-paid. It is easy to understand that a high class of officials can be procured at high wages; but the opposite proposition is difficult to believe, that, at low wages, candidates can be found for these posts, whose morals are perfect and who are free from any suspicion of cruelty. Nevertheless, the Inspectors repeat that their remuneration admits of much improvement, and point out the result that attendants, as soon as they become educated to their duties, emigrate, and are succeeded by others quite uneducated, who, in turn, on acquiring some experience, seek a like engagement wherever they can get better pay; or, on earning the cost of their passage, emigrate to America. Happy the country which can supply a continual flow of young men with such perfect morals! We advise all American and Canadian Superintendents to be on the look out for them.

But however indispensable the professional knowledge and experience of the superior officers attached to lunatic asylums must be for their successful management, it is not the less requisite that attendants in immediate and continuous charge of the insane should be suited to their respective duties. Coinciding in the opinion so often expressed by the English and Scotch Commissioners on the remuneration of some subordinate staffs within their supervision, we cannot but repeat that in this country it admits of much improvement.

Superannuation is said to hold forth very little attraction.

No doubt a retiring pension is recognised at the end of a certain number of years, but the amount on which it is calculated is so uncertain that, as a rule, very few remain to benefit thereby.

A more likely reason would appear to be that the period of service (forty years) under the Lunatic Asylums' Superannuation (Ireland) Act, 1856, is so long that it is the lot of few to enjoy human existence lengthened to such advanced age.

Our district asylums have been already fifty years in existence; at present there are nearly eight hundred individuals of the class adverted to in them, while on retirement after a full length of service there are probably not a dozen receiving pensions. Thus the emoluments of place, calculated to a considerable extent on allowances, and so obtaining prospectively a fictitious character or monetary value, interfere with a reasonable payment for services while being rendered.

The meaning of the last sentence and its connection with the context is so doubtful that we must leave it to our readers to explain it for themselves.

The balance-sheet of the expenditure of district asylums stands thus:—

	£	s.	d.
Balance in hand	37,459	0	0
Rate in aid	89,424	12	0
District rates	114,953	2	3
Self-supporting patients	4,750	9	6
Produce of farm and incidents ...	5,974	13	8
Total	£252,561	17	5

On the other hand the expenditure amounted to £200,267 13s. 9d., and included—

	£
Provisions	94,300
Salaries	47,000
Clothing, furniture and bedding	29,500
Fuel and washing	16,000
Repairs and alterations	11,200

The average cost per head amounted to £22 16s. 3d. Subtracting from this the Treasury rate in aid, the cost to the ratepayers amounted to £12 8s. 5d. for each Irish lunatic.

We would here suggest the wisdom of assimilating the statistics of expenditure and cost of maintenance with that of other countries by giving the cost of maintenance, medicine, clothing, and care of patients in asylums by week and not by year, and so making Table No. 19 correspond with a similar table in Appendix E. of the English Commissioners' Blue Book.

Indoor amusements and agreeable occupations—reading, music, dancing, scenic entertainments and the like—with outdoor games and occasional excursions into the country, have been liberally afforded to patients capable of their enjoyment, during the year under consideration, by the various Boards of district asylums, in which we are glad to notice a growing tendency to dispense, as far as possible, with

all arrangements "*of a restricted character*," although, in truth, what the precise meaning of "arrangements of a restricted character" may be, it is difficult to understand. Whether it means that the governors of asylums have given up all ideas of economy and have become lavish in their expenditure, or have laid aside all forms of restraint, strait waistcoats, locks, bars, airing courts, high walls, or have removed all restrictions as to the admission or discharge of the inmates, their dietary or treatment, we are left in doubt.

Next follows a series of short statements on the condition of the twenty-two district asylums; they are all of a most laudatory character, but contain little of interest to the general reader, except the ratio of the insane to the general population in each district. A more systematic mode of reporting, by which one institution could be fairly compared with another, is much to be desired. We would suggest to the Inspectors the scheme of reporting proposed in Vol. xviii., p. 352 of this Journal.

In these reports on the various asylums, references are made to the indebtedness of lunacy districts to the Treasury. The advances by their lordships, since the passing of the 1 and 2 Vic., s. iv., amounted altogether to close on £1,540,000, out of which a balance of £240,974 remained due at the end of last March. A table, giving the different items and dates under this head, will be found in page 110 of the Report.

With reference to the distribution of insanity in the various counties, the Inspectors point out the small number of the insane to be found in Mayo, so that in a population of 240,000, the asylum accommodation only amounts to 280 beds, and in the various workhouses throughout the county 82 comprise the whole number of idiots, imbeciles, epileptics, and lunatics. This remark holds good to almost the whole province of Connaught. Comparing, on the other hand, the prosperous County of Down, with an asylum containing 460 patients, there are 139 insane paupers in its workhouses, in an existing population of 260,000. Again, in the rich and fertile district of Limerick, amongst 173,000 inhabitants, in addition to 480 lunatics in the asylum, the number of insane in poorhouses amounts to 245.

The reason given for this is that destitution was far more severely felt in Connaught during the famine years than elsewhere, at which time the unprotected and unhoused insane suffered most severely in the struggle for existence.

The report of the resident physician of Dundrum Criminal Asylum is given as usual *in extenso*. He points out that the health of the inmates has been much improved by sanitary arrangements, especially by the adoption of a self-acting apparatus for flushing the closets. When speaking of the farm, he regrets much the sum which had to be paid for plough labour. This, he states, is due to the inmates refusing to work owing to the system of rewards having been put a stop to. In urging the alteration of this, he states

that the system of rewards for work done is in full operation at Broadmoor, and is found to work well. The Inspectors, however, decline on principle to establish an injudicious precedent on behalf of idlers well supplied with food of the best description. At the date of the report 172 insane prisoners were in the asylum, and had it not been for the unusual mortality in 1882 and 1883, averaging eight per cent., the buildings would not have afforded accommodation for the number admitted, amounting to forty-nine in the last eighteen months.

The mentally affected inmates of Union Workhouses in Ireland on December 31st, 1883, amounted to 3,726—1,488 males and 2,238 females—an increase of 15 on the year before.

As a rule the Inspectors believe them to be treated with consideration, located in detached buildings, and placed on a more liberal and nutritious dietary than that given to ordinary paupers. From personal observations they believe that their comforts, as a rule, are practically progressing. The most notable deficiencies are referable to restricted airing grounds, the want of separate day rooms, and congenial modes of occupation under responsible attendants. The Guardians of the Belfast Workhouse are, according to the Inspectors, deserving of every praise for their appreciation of the wants of the idiotic and epileptic inmates, having erected a spacious pile of buildings, with a fair acreage around, for their pauper insane.

The number of private patients in Ireland seem to have fallen off considerably. On 1st January, 1884, the inmates of private asylums amounted to 636, as against 651 on like date in 1883. Here we may again repeat a suggestion made a long time ago in this Journal, viz., that those institutions kept wholly for profit should be distinguished from the hospitals which are supported, to a very large extent, from special funds, and are not kept for any individual gain. Many of these exist in Ireland, viz., Swift's Hospital, St. Vincent's, the Friends' Retreat, and the Stewart Institution.

The Report concludes with the usual statistics to be found in the Irish Lunacy Report, omitting, in addition to those referred to in the beginning of this article, the tables giving the salaries and emoluments of officers and attendants.

Body and Will. By HENRY MAUDSLEY, M.D. Kegan Paul, Trench, and Co. 1883.

Prolegomena to Ethics. By the late T. H. GREEN. Clarendon Press: 1883.

(*Concluded from July,* 1884.)

We alluded in the closing sentences of the earlier part of this review to the interesting work that is included in Part III. of Dr. Maudsley's book, which he entitles the Pathology of Will. It opens with a chapter "concerning degeneration," and from that opening to the final dirge, entitled

"What will be the end thereof?" it reflects throughout a startling pessimism. The author thinks, for example, that, "in order to have a theory of cosmogony that shall cover all the facts, it has always been necessary to supplement a good principle by a bad principle, a god of creation by a god of hate and destruction." And he is so staunch a Manichæan as to predict that it will always be so, that to believe in the survival of good over evil is as foolish as to persuade ourselves that repulsion will one day survive attraction, and that, in fact, there is always good reason to believe that "the sum of the respective energies of good and evil remains a constant quantity." Into these dark depths of despair we decline to follow him, for indeed they are in no wise necessary deductions from his scientific data, but rather an offspring of his own metaphysics. It is of more value to follow his progressive study of moral degeneracy as it appears in actual practice. He starts, for simplicity, with the case of children *morally* but not *intellectually* defective; and he summarises the lessons of such a case in this way:—

"One might represent the stages of descent in this fashion: 1. Absence of exercise, and through disuse decay, of the highest social sensibilities and powers, moral and volitional, in one generation: therewith lifelong unchecked exercise of the secondary or social developments of the egoistic passions in the conduct of life: consequent moral degeneration, which, by its nature, goes deeper into character than intellectual degeneration. 2. In a succeeding generation some form or other of positive mental derangement; or such a development of vice in character as falls a little short only of madness or of crime. 3. In the third generation moral imbecility or idiocy, with or without corresponding intellectual infirmity." This is an excellent statement of the broad lesson, deducible from the whole range of hereditary degenerations in human life, that the "acquired infirmity of one generation will become the natural deficiency" of a succeeding one. Two reflections occur to us, however, when we look closely into the case as it is stated here. In the first place, does not the very possibility of "acquiring an infirmity" by moral choice and persistent repetition of voluntary acts which we know to be wrong, imply exactly that freedom of the will which Dr. Maudsley would deny? And again, is it quite true that a "natural deficiency" cannot, at least in all the lesser degrees of it, be improved out of existence by a contrary moral exercise of the will?

We pass reluctantly over Dr. Maudsley's careful discussion of the various kinds of moral perversion in disease, as in hysteria, epilepsy, injuries to the head, and alcoholism. They are a tempting subject of discussion; but it is more tempting still to consider his views on the "Moral Sense and Will in Criminals," which forms his Section IV.

"Habitual criminals," says Dr. Maudsley, "are a class of beings whose lives are a sufficient proof of the absence or great bluntness of moral sense." In spite of the great authority of the writer, this strikes one as too sweeping a generalization. It is perfectly true, of course, as he goes on to explain, that a certain proportion of them are of obviously weak intellect, and that many, perhaps most, are malformed or deformed in part or whole of body. But it seems to us not to be true that "the organization of the wicked is commonly defective." Surely some of the grandest criminals—the great swindlers and forgers, the successful villains of good society—are men of rather favourable and efficient organization, who have gone wrong because it seemed to them preferable to do so, and because they trusted in their talents to conceal their crimes and to achieve social success by what Dr. Maudsley calls "anti-social" means. In any case, it is worth notice that Dr. Maudsley protests strongly against the present methods of criminal punishment, and also that he reminds the world that "it is small profit to teach a child the distance of the sun from the earth, if he be not taught at the same time to know, and not taught to know only, but trained to feel, the distance between its higher and lower natures." It is to be regretted that he did not incorporate with this section of the work, some clear statement, as it appears to him, of the bearing of these questions upon the whole theory of a criminal law and of judicial responsibility. It is all very well to say that society must punish crime, whether it was the fault of the criminal or no. In certain cases that may be true; yet the existence of any such thing as the legal defence of insanity implies that at a certain point the doer of a criminal deed must be held to be irresponsible. Dr. Maudsley seems to drift towards a theory in which all criminals would be in justice irresponsible, since it is their organization that fatally condemns them to be what they are. It is one of the most difficult of the many matters concerning the law, as it is related to mental disease, to say how and where the boundary line is to be drawn.

In passing on to trace the relation of mental derangement

in general to Will, Dr. Maudsley discusses for a time the moral degeneracy of modern society; and his verdict will startle most of his readers. There is no hope, he says, save in revolution. Evolution, beyond a certain point, breeds an egoism, which is worse than the primitive egoisms out of the escape from which society arose, because it has itself put on a quasi-social shape. Men of evil ends have learned to find in association the best means of preying on society. Trades are organised to defraud and cajole the public. A swindle must needs be a joint-stock company, and every phase of wickedness has its own appropriate solidarity. The complexity of the social organism swamps the simple ideals and the direct aims which give "the radical principles of human association;" and it is only by the tragic events of an "uprising from below" that Dr. Maudsley sees any hope of bringing the perverse generations back to the stern realities of their existence.

From these wider discussions, however, we return at once to the fundamental point of all psychology, when the author proceeds to discuss what he styles "the disintegrations of the ego" in mental disease; and here we find ourselves again in the range of questions on which the schools represented by Prof. Green and Dr. Maudsley are fundamentally in conflict. Dr. Maudsley refers, of course, to the various cases of so-called "circular insanity" or "double consciousness," comparing them to the phenomena of hypnotism, and the conclusion he draws is that "the consciousness of self, the unity of the ego, is a consequence, not a cause—a subjective synthesis or unity based upon the objective synthesis or unity of the organism: as such it may be obscured, deranged, divided, apparently transformed, for every breach of the unity of the united centres is a breach of *it*." To those who have followed our earlier criticism, it will not seem strange that we should place alongside this dictum the pronouncement of Mr. Green (best stated perhaps at p. 85), that the "distinction by man of *himself* from *events* is essentially different from any process in time, or any natural becoming," that "it is through it that he is conscious of time, of becoming, of a personal history; and the active principle of this consciousness cannot itself be determined by these relations in the way of time or becoming, which arise from consciousness through its action," and that "human action is only explicable by the action of an eternal consciousness, which uses the process of brain, and nerve, and tissue, and

the functions of life and sense as its organs, and reproduces itself through them." In a word, Mr. Green would reply to Dr. Maudsley's phenomena of double consciousness that it is strictly and logically *inconceivable* that a man, so long as he is a man, should be anything but an ego—in the sense of an entity uncaused by, and unsubject to, the bodily processes of which the pathologist takes account. Human life and knowledge are, as the idealist offers to show, inexplicable on any other hypothesis. No "ego," so-called, which was merely "a subjective synthesis based on the unity of the nerve centres," and which was therefore a result of organic functions, and at the mercy of them, *could* ever be a conscious being at all. It is as impossible as that water should run up hill, or that the stones should speak. To ask *why*, in the constitution of the world, the ego in us, which is in itself transcendent and not a result of natural causes, should yet be limited strictly to express itself only in and through organs which *are* under the general limitations of matter, and are therefore subject to disorganization and death, is like asking why that mind, which the universe implies, should have manifested itself in a world at all? It is a question unanswerable, until we are beyond the range of all the limitations which these same organisms imply. But it is for all that an evident fact, and, being so, it must serve for the explanation of the phenomena of madness, as well as a hundred other not less difficult problems of human life. Whether it is in any sense conceivable that there may be a sane ego behind the mask of a diseased brain, is another and a very difficult question, to which perhaps some of our readers, who are interested in the ulterior problems of mental science, might help to find the answer.

There is no doubt, for example, that in many cases of aphasia the patient's mental health is good enough to enable him evidently to know what he wants to express and to be annoyed, often to paroxysms of rage, at the impossibility of getting his disorganised centres of speech to formulate in outward shape the thing he desires to say. He may be able to write and yet not to speak. He may be able to do neither, and yet may have some power of expressive gesture. All this may fail, and yet when his impatience is interpreted aright, he may show by his pleasure that his mind knew what it wanted, and could, as far as the mental effort went, have normally expressed it. If the facts, in a case where we can so closely and accurately observe them, carry us so very far,

may it not be that when other forms of mental disease are studied further, we shall find other instances in which also traces of the sane mind can be detected, in spite of the refusal of the brain organs to convey any coherent thought into expression or action, or in spite of a persistent distortion and perversion by the same diseased centres of volitional acts and impulses, whose inception, as far as the mental act went, was rational all the while?

As Dr. Maudsley and Prof. Green are at odds in their conceptions of the starting point of all philosophy, it is natural that they should differ also as to the end. The materialist closes his book with a pessimism, beautifully and powerfully, even poetically, stated, but absolute and hopeless. "The common law of life is slow acquisition, equilibrium for a time, then a gentle decline that soon becomes a rapid decay, and finally death." To this law nations and humanity are as surely doomed as any individual life. "Once the dissolution of things has got full start and way, it will be vastly quicker than the evolution has been." Humanity in its retrograde process will produce new savages, but they will no longer be the simple, childlike, relatively harmless savages of the beginning: they will be "new and degenerate varieties, with special repulsive characters—savages of a decomposing civilization." What takes place in the life of senile individuals daily "will one last, long day take place in the life of the race." The ideals of the world, ever rising till now, will not only not be realized, but will themselves decay, and "give place to ever-worsening ideals of ever-worsening states of things." Not only this, but the daring author even goes on to hint that the disillusioning process has already begun. For himself, he suggests that it is not "so certain as it is assumed to be that a higher moral evolution, should it take place, will tend necessarily to the greater happiness of mankind." For the world around him, he finds in its "maladies of self-consciousness" many forewarnings of its destiny, when it shall come to the old conclusions of Solomon and Job, but in a wider earnest, as to the vexation, and vanity, and littleness of life. And thus, by way of final conclusion, he comes down to the annihilation even of his own philosophising—for after holding that it is presumptuous to forecast the future of the world, and better to hold one's peace, he adds the words which touch the Ultima Thule of pessimistic scepticism—"But be the words spoken those of folly or of wisdom, they are in the end alike, vanity. All that which is

past is a Dream: and he that hopes or depends upon Time coming, dreams waking." To what good end then, if this be so, is any preaching, or study, or energy at all? Two courses only are open, if we may speak as if we could *choose* courses, for that also is taken from us. Yet if we *could* choose, we should either say, "Let us eat and drink, for to-morrow we die"—or we should make our quietus with a pistol or a pill. We confess that it seems to us that the very fact that a materialist theory of life and nature leads to this result is a sufficient proof that that theory is wrong from the beginning. The explanation of life which stultifies it cannot be the true explanation. There may be delusions and illusions here and there, from local and relative causes in the complexity of every life; but life itself cannot be thought to be a delusion, any more than we can carry scepticism to the point of believing that *we* do not exist. On Mr. Green, indeed, the phenomena which discourage the optimist in the history of the world and of ourselves, press almost equally hard. But he denies that they are any real guide. He confesses (at p. 196) that "the facts of human life and history put abundant difficulties in the way of any theory whatever of human development. If it were not for certain demands of the spirit, which is ourself, the notion of human progress could never occur to us. But these demands, having a common ground with the apprehension of facts, are not to be suppressed by it. It is the consciousness of possibilities in ourselves, unrealized, but constantly in process of realization, that alone enables us to read the idea of development into what we observe of natural life, and to conceive that there must be such a thing as a plan of the world."

It is the same method of argument over again. Our guarantee of these ultimate truths is not an induction from observed facts, which are all the children of a consciousness, without which no perception can be, but is an analysis of the precedent conditions implied in knowledge, or in self, or in the world. That there should be a fact at all, is the first marvel; and in the unravelling of all that this implies, we find the key to the mystery of the Universe. It is the only key that has yet seemed able to unlock the hiding places of selfhood and moral duty, of the present and the future life, of the Human and the Divine. It is worth a better trial than it has yet obtained in England. If it holds, all is well. If it breaks, it will be time enough for Pessimism then.

OXON.

Lectures on Mental Disease. W. H. O. Sankey, M.D. London: Lewis, 1884.

Those who remember with pleasure the originality and shrewdness exhibited in the first edition of these lectures, will not be surprised to find that, though so much altered and enlarged that it may be considered a new work, the book before us displays some of the most distinctive and original peculiarities of the earlier issue.

The present edition is divided into five parts. The first deals with Mental Science or Physiology. On the metaphysical side Comte's doctrines, as expounded by Lewis, are accepted on the more strictly physiological, the teaching of Spencer and the English school. Modern physicians will scarcely quarrel with this, but it may be observed that the paramount importance of heredity as solving certain difficulties which have always arisen with reference to *a priori* mental products, &c., has not yet received proper recognition.

Part II., consisting of nine sections, deals with Mental Disease, or Pathology. The most striking feature here, as in the earlier edition, is the mode in which classification is treated. The following is the arrangement the author adopts:—

A. Idiopathic	1. Morbid	1. Ordinary Insanity.
		2. General Paresis.
	2. Developmental	3. Idiocy.
		4. Senility.
B.	Symptomatic	5. Epileptic Insanity.
		6. Alcoholismus.
		7. Spinal Diseases.
		8. Organic Cases.

The reader will perceive that the greater number of all the cases we meet with are here comprehended under the general term "ordinary insanity." "Cases of mental disease vary much in their course and progress. At one period the subject will present phenomena totally different from the symptoms presented at a different period. I maintain, however, that the case must be considered to be of one species throughout; such is the rule in general pathology, and there are no grounds for having a different system in insanity, however long the case may last. For a case to be placed

under a different name it should differ from all other cases, as distinctly as acute rheumatism from typhoid fever." Thus it appears the author's opinions as to classification are based chiefly on his opinion as to the course and progress of an "ordinary" case of insanity. In this point he is very decisive and original, and his views are worth careful examination. "The disease has its well-marked and definite symptoms, and runs its course in a manner which observation enables us to describe. . . . Thus, a case in the primary attack commences by symptoms of melancholy; these may . . . pass off . . . or the melancholic stage may be aggravated and the patient die; or if the patient does not die, the disease may exhibit symptoms of violence and become acutely maniacal. . . . A patient without becoming maniacal, however, may continue melancholic, and the disease become chronic. The case of the patient who has passed into a condition of mania may also become chronic in that stage, and he may recover or die. Next, the chronic case may alternate in different ways between a melancholic and maniacal condition; and, lastly, if the patient does not die in this stage, or recover, the chances of which would be slight, he may pass into a condition of imbecility or dementia." Accordingly the author proceeds to describe, (Section 1) under the name of the first stage, the various symptoms of what would be ordinarily called melancholia; under the name of third stage (Section 2), chronic melancholia, chronic mania, and alternating forms. No one can deny that this is a striking view, and no careful observer can doubt that in some points it is very noteworthy, but the question arises, Has not the author's reasonable dislike to the over refinements of classification led him too far? Does he not generalise too much? In fine, is this course of insanity, as he strictly lays it down, truly in accordance with clinical experience? We think few of our readers will endorse Dr. Sankey's view in its entirety. The variety of symptoms which any case of insanity *may* exhibit during its course is not more remarkable than the variety of ways in which it may commence. Hard-and-fast classifications have often before now been compared to the bed of Procrustes—and with justice—but by what process of lopping or stretching can we make all ordinary cases of insanity begin with melancholia? That a prodromal stage of depression is very common is undoubtedly true, and one of the most valuable points in Dr. Sankey's earlier work was his

insistance on this fact, but the universality of this first stage we traverse, and we think it is possible to exaggerate its importance where it does occur. For in many cases where something resembling melancholia precedes an outbreak of mania, it is certainly rather of the nature of dulness arising from the retardation of activity in the normal mental functions than a truly depressed emotional state.

Dr. Sankey denies the existence of acute dementia altogether, not distinguishing between it and *melancholia cum stupore.* While strongly objecting to the term, we still hold that there are certain cases of "Mental Stupor" (a much better name) which are not based upon melancholia, exceptional as they doubtless are.

In a Section on Recurrent Insanity the author states that the second attack differs from the first by the sudden advent of symptoms and general absence of a melancholic stage.

Section 4 discusses "the various so-called kinds of Insanity," and Section 5 contains clinical cases, "examples of Insanity Proper." These five sections contain much that is valuable and original. The author gives due prominence to the remarkable disturbance of digestive faculties that almost always occurs in the earlier stages of melancholia, and which has not elsewhere received by any means the notice and practical attention its importance calls forth. In this point also the author develops the views expressed in his earlier edition. In the description of symptoms there is much accuracy and acuteness, though sometimes, perhaps, the author's theoretical opinions have interfered with their completeness. For example, though Puerperal Insanity may not be logically or pathologically separable as a distinct form, yet there are two symptoms that occur so frequently in puerperal cases, that they seem to call for differentiation, namely, sexual excitement and mistakes on the patient's part as to identity.

The value of a patient's acknowledgment that he has been insane as a proof of his present recovery is rightly insisted upon.

We miss any mention of the frequency of a certain kind of small constant restlessness as an indication of the suicidal tendency in melancholia.

Intense flushing after eating is noted as a common symptom in ordinary insanity. It has been described by a German author as common in the preliminary (melancholic) stage, and as it occurs in dyspepsia without insanity,

it is probably connected with the same condition of the nervous system that causes the digestive troubles in melancholia. The frequent accompaniment of melancholic apprehensions by a "physical sensation of dread at the præcordia or region of the aortic arch" is not overlooked.

The oft-noted association of erotic and religious excitement is confirmed by our author.

The value of a gain in the body-weight is referred to, but it is not stated that this symptom must be carefully scrutinized, seeing there is an unfavourable as well as a favourable gain in weight.

On the subject of Moral Insanity Dr. Sankey quotes, with apparent approval, a well-known passage from Blandford. His own opinion clearly is that cases described under this head are really cases of Recurrent Insanity. "It is not only important to know that the propensity exists in certain morbid conditions to break out into these criminal acts, but it is equally of importance to know that when one of these apparently motiveless acts is committed by *a lunatic*, there will always be found a history of insanity in the accused's life; for such outbreaks in a lunatic *are only met with as phenomena of second or subsequent attacks;* this fact is important." Very important, indeed, if true!

Section 6, on the Etiology and Pathology of Ordinary Insanity is a good summary of what is known of these rather obscure subjects. Here and there the author's style wants some elucidation—as at p. 218, where we read that the prominent remote cause seems to be of a moral kind, "when a man becomes insane after a long course of hard drinking."

Section 7 and 8 contain an account of General Paresis, of that excellence which we should expect from this author. As to etiology, he seems to have somewhat modified the views cautiously expressed in the first edition as to the importance of sexual excess. Having pointed out the undoubted existence of strong sexual propensity in paretics, he comes to the conclusion that this is less to be regarded as a cause than as an effect of disease.

The pathological portion contains a good description of the varicose condition of the small arteries previously noted in the author's earlier work. There is an ingenious conjecture as to the cause of the frequency of broken ribs in paretics. A man in health will receive a powerful blow on the chest if he sees it coming, or will without injury

bear great weights on his chest, because the intercostals back up the ribs so as to form a powerful arch. This does not take place in paretics, owing to stupidity, dulness of sensibility, and slowness of reflex movement. The last condition would not, however, exist in all cases.

In the ninth and final Section of this Part, idiocy and senility are described under the head of "States of Mental Weakness."

Part III., on "Symptomatic Mental Diseases," contains a description of Epileptic Insanity, Alcoholismus, Spinal Cases, and Organic Brain Disease. Dr. Hughlings Jackson's views are adopted as explaining the phenomena of the epileptic seizure. The question of diet is touched upon: "Epileptics are enormous eaters, and the fits are induced by too great distension of the stomach. I have met more than one case where the first attack was traced to the patient's over eating." It may be remembered that the first oncome of Swift's epilepsy was attributed to this cause. The description of alcoholism is good, and there is a useful analysis from a French author of the diagnostic distinctions between this affection and general paresis.

Many hints as to treatment are found in Part II., and Part IV. is devoted altogether to this topic. The author prefers chloral to opium as a hypnotic, and does not seem to have found any evil result from the use of the former. He has seen much benefit in mania from cod-liver oil, and recommends among tonics the potassio-tartrate of iron, particularly for females. With regard to moral treatment, we are rightly told that mental rest is emphatically the object to be attained; therefore, to change the patient's environments is the first indication. This can only be carried out by early systematic treatment—not necessarily always asylum-treatment, however.

Part V. is devoted to the legal relations of Insanity, of which a useful summary, both for general practitioners and specialists, is given.

On the whole these Lectures form a valuable addition to the literature of the subject. They are characterized by much individuality and strong common-sense, together with a laudable avoidance of verbosity and "fine writing," while the author steadily refuses to be guided by the authority of previous writers to paths where his own experience and judgment do not lead him.

C. N.

PART III.—PSYCHOLOGICAL RETROSPECT.

Colonial Retrospect.

By D. Hack Tuke, F.R.C.P.

Under this head I propose to give my impressions of the condition of the insane in Canada, derived during a visit made to the Dominion in August last.

The Insane in Ontario.

There were, on the 30th September, 1883, 2,825 patients in the Provincial Asylums of Ontario. This is an increase of 83, or 3·02 per cent. over the previous year. There were two less in the Insane Wards of the Kingston Penitentiary, and the insane in jails, awaiting removal, were fewer, viz., 34 instead of 47. There were 23 patients at home on trial. In all there were 3,070 insane and idiotic persons officially recognised, being 137 more than in the previous year.

They were thus distributed :—

	M.	F.	Total.
Toronto Asylum	358	345	703
London Asylum	440	455	895
Kingston Asylum	230	219	449
Hamilton Asylum	246	301	547
Total insane in Asylums	1,274	1,320	2,594
Asylum for Idiots at Orillia *	122	109	231
Total	1,396	1,429	2,825
Insane Convicts in Kingston Penitentiary	29	2	31
Insane Idiots in Common Jails	21	13	34
Total	1,446	1,444	2,890

If to the above numbers are added the patients whose names are on the files for admission into the above asylums, viz., 157, and the number of patients out on probation, viz., 23, we obtain the total number known to the authorities at the above date, viz., 3,070.

Dr. O'Reilly, of Toronto, the Inspector of Asylums, who provided me with this information, states that there were 2,837 beds in the asylums of the Province ; so that as 2,825 patients were resident at the time of this return, and a certain number were out on trial, it is clear that at that period the capacity of the institutions was pretty fully reached. More recently additional buildings have been erected, but

* On Lake Simcoe. Dr. Beaton is the superintendent.

as the number of insane has increased, the relative proportion of supply and demand is probably about the same. It may be stated that the admissions during the year ending September, 1883, were, as regards the asylums mentioned, 543; the number discharged recovered was 174; and improved, 52; and the number of deaths, 183. The ratio of recoveries to admissions, viz., 33·52 per cent., is stated by Dr. O'Reilly to be higher than any year since 1877. The idiots are, of course, excluded. The mortality, calculated upon the average number resident, was 6·31 per cent., which is lower than for some years previously.

The total annual cost per patient in 1883, in the four asylums for the insane, varied from 127 dollars 16 cents (Hamilton) to 145 dollars 12 cents (London); the weekly cost being respectively 2 dollars 44 cents and 2 dollars 79 cents. Dr. O'Reilly contrasts the low rate of expenditure in the Canadian asylums with that of the United States, where the lowest average is 227 dollars 75 cents per annum per patient; while in Ontario the average is 134 dollars 68 cents. And he quotes the saying of one of the superintendents of the asylums in Ontario that this scale is "nearly poor-house rates." The same contrast has struck me as very remarkable, and the explanation is not altogether creditable to the Canadian Government. The salaries of attendants and servants are lower in Canada, but the explanation of the difference is to be found, according to the Inspector, in the relative character of the lodging, clothing, and, he proceeds to say, more especially the food. The quality is said to be good, but it is "plain and unattractive," so as to become extremely distasteful to many patients. It is difficult for a stranger to form an opinion on this subject, because he is unacquainted with their diet at home; but the asylum dietary is as good as in our county asylums.

The revenue from paying patients, of whom there were 538 in the asylums, amounts to a very considerable sum, viz., 59,922 dollars (£12,485) during the last year. This certainly points to the probable success of a private asylum which has recently been established at Guelph, and of which Dr. Lett is the superintendent.

I find, from a return made of the number of patients employed in the asylums of Ontario, that 52·57 per cent. of the patients were engaged in some occupation; being 1,479 out of an average population of 2,813. The largest percentage was at the London Asylum, viz., 69·89.

The authorities in Ontario are not blind to the difficulties connected with the accumulation of incurable patients, for whom the question of separate accommodation arises. I am glad to observe that the latter difficulty is being met by the erection of small buildings; these being sometimes devoted to the curable class of cases, while the larger buildings are retained for the incurable. In some instances, however, small buildings or cottages are, and may properly be, devoted to the chronic insane; while the recent cases are treated in

the old and more expensive building. Dr. O'Reilly believes that the general feeling is entirely in favour of detached wards or annexes, and I certainly found this to be the case at the asylums which I visited.

It will be advantageous to state here a few of the leading provisions of the existing statute relative to lunatics enacted in 1871 by the Legislative Assembly of the Province of Ontario, entitled "An Act Respecting Lunatic Asylums and the Custody of Insane Persons" (chapter 220).

The Public Asylums are established and acquired under a grant from the Legislature of the Province, and are invested in the Crown.

The Lieutenant-Governor has the appointment of the Medical Superintendent.

Among the duties of the Medical Superintendent are those of reporting the condition of the asylum to the Inspector of Prisons and Public Charities at each visit, and also to report annually to the Inspector upon the affairs of the institution. The financial affairs of asylums are conducted by the "Bursar," who is appointed by the Lieutenant-Governor.

The salaries of these officers are fixed by the Lieutenant-Governor, and do not exceed 2,000 dollars for the Superintendent, and 1,200 dollars for the "Bursar."

In regard to admissions, no patient can be admitted (except upon an order by the Lieutenant-Governor) without the certificates of two medical practitioners, each attested by two witnesses, and bearing date within three months of admission. Each certificate must state that the examination was made separately* from any other practitioner, and after due inquiry into all necessary facts; the medical practitioner specifying the facts upon which he has formed his opinion, and distinguishing those observed by himself from those communicated to him by others. Dangerous lunatics may be committed to jail by a Justice's warrant on his receiving the necessary information, and after evidence given with reference to the prisoner's state of mind. He remains in jail until removed to an asylum by the Lieutenant-Governor, where he remains until discharged by the same authority.

The Inspector of Public Charities is *ex-officio* the Committee of every lunatic having no other, and who is detained in any public asylum of the Province. The Court of Chancery may at any time appoint a Committee of any such lunatic, if it considers it expedient, in place of the Inspector. The Chancellor, who may call experts to his assistance, decides the question of mental unsoundness and incapacity to manage his affairs, without a jury. I understood that the number under the legal guardianship of the Chancellor is somewhat under 400. They are placed in confinement under his warrant. For this class, the legal checks are much more stringent. They are subjected to more

* Curiously [enough the previous Act required the examination to be made by the physicians together. "Three months" is a long period.

official recognition, and they cannot be discharged without the sanction of the Inspector. The ordinary patient, whatever may be his social position, is admitted into an asylum on two medical certificates, and he may be discharged by the Superintendent without reference to the Inspector.

In regard to *Private Lunatic Asylums*, Justices of the Peace assembled in General Sessions may grant a license to any person to keep a house for the reception of lunatics within the county. The regulations of private asylums are moulded upon those of the English Lunacy Laws, and need not, therefore, be given.

Returns are made monthly by the asylums to the Inspector in regard to admissions, discharges, and deaths. It is obvious that if these returns are made with a view to prevent improper admissions, or to allow of an inquiry in alleged deaths from violence, far too long a period elapses before the Inspector has cognizance of an admission or death at an asylum. It is argued that in the case of the private institution at Guelph, a Committee has general oversight over it, and that this constitutes a sufficient guarantee against abuses. But however good it may be, and doubtless is, it does not supersede the necessity of an independent Government official receiving immediate information in regard to the admissions and deaths of patients in every asylum, for whose inspection he is responsible to the public. And, before dismissing the subject of inspection, I would say it is a great defect in the law which enacted it, that it is not made imperative to have one of the Commissioners a medical man.

Passing to the asylums themselves, I will first refer to the asylum at *Toronto*, which I visited on the 20th of August last. The contrast, as I have elsewhere intimated, between the asylums of the Province of Ontario and those of Quebec is really astonishing. The system is essentially different. The Legislature of Ontario recognises the duty not merely of discovering institutions to which it can send its insane poor at so much a head, but of providing the institutions themselves, and making the State responsible for their proper management. I do not maintain that all has been done that can be done, or in all instances on a sufficiently liberal scale, nor yet that the asylums are perfect in their organization and management, still less that the system of inspection is the best that can de devised ; and I object to any alleged dangerous lunatic who has not committed a crime being in the first instance sent to jail, and thereby branded as a criminal, but I have no hesitation in saying that there is a sincere endeavour to make adequate provision for the insane of the Province ; that the inmates of the asylums are carefully treated, and that there exists among the superintendents a real interest in their work, and a desire to do their duty to their patients.

At the Toronto Asylum, superintended by an active administrator (Dr. Daniel Clark), there are 710 patients, the sexes being almost equal. The spacious corridors (15 feet in width) and rooms are

carpeted, and altogether well furnished, and in those used by the destructive patients there is not the dismal bareness too often witnessed. There is strong evidence of the great care and attention paid in this asylum to cleanliness, the dress and the general comfort of the inmates. There was hardly anything deserving the name of mechanical restraint. On the female side there has been practically none for two years, and as regards the men patients there has been none whatever, Dr. Clark informed me, for seven years. No patient was in seclusion at the time of my visit. Indeed, Dr. Clark strongly objects to its use. There is one feature in the construction of the asylum which attracts the notice of the visitor at first sight, not very pleasantly, it must be admitted, and that is the succession of semi-circular spaces or verandahs at the end of the corridors, protected and enclosed as they are by strong iron palisades. A glazed wooden frame partitions off these spaces from the corridor. On the areas of these projecting spaces the patients stand or sit on chairs, gazing on the outer world through the vertical bars. On those who look up to them from below, the impression of a cage in a zoological garden may be, and indeed has been, produced. At the same time it is surely much better for the patients to be able to step outside the corridor into such an enclosure and breathe the fresh air, than not. The view over the Lake (Ontario), etc., is extensive, and affords variety, while the objection which may be made in regard to the effect produced upon other minds is rather sentimental than practical. In a new building no doubt this precise construction would be avoided, or an ornamental guard would be constructed in place of simple bars.

The pay of the attendants, with whose appearance I was pleased, both as regards personal expression and dress, is liberal—18 to 26 dollars a month for males, and 10 to 12 for females. In the wings there is 1 attendant to 12 patients; not so many in the central large wards. There are also six night watches, three on each side of the house. There are six galleries for private patients. They pay from three to six dollars a week. There are also six free wards. Four hundred patients pay nothing. The weekly cost per patient is a little more than $2\frac{1}{2}$ dollars a week, or 134 dollars (£27 6s) a year, exclusive of the capital account or repairs.

The patients are employed to a considerable extent, namely, about 60 per cent. of the free class, from whom alone work can be obtained. All the vegetables required for the asylum are raised on the grounds. There are 140 acres. Dr. Clark, however, states in the report he favoured me with that the last potato crop had proved a failure, but that the other crops were about the average. As there are about 29 acres under crop, the potato failure was a serious one for the asylum. As there are no crops of hay and oats, the cultivation of roots is mainly attended to, and Dr. Clark calls attention to the need of more arable land. The value of the produce of the present small farm was 13,763

dollars in 1883. Buildings, including a prison, have grown up in the vicinity; a regrettable circumstance, especially if, as I understand, land belonging to the institution has been sold for building purposes. There are, distinct from the main buildings, three cottages, in which 120 female and 50 male patients are accommodated. One is cheaply built, and is well adapted for the purpose. There are good day-rooms and dormitories. The floors are partly carpeted, and there are a few pictures on the walls.

The separation of cases which these annexes furnish, affords advantages which here, as elsewhere, are fully appreciated.

This, as well as the other Ontario Asylums, is inspected by one of two Inspectors of Public Charities and Prisons in the Province. He visits four or five times in the course of the year, and oftener if he sees fit. The Grand Jury have the power of visiting the asylum if they wish, and when they do so they make a presentment to the Court. Their visits, however, are, I believe of a somewhat formal character.

This asylum was opened in 1843, and was at that time the only institution for the insane in the Province. Indeed, this was the case when the well-known and universally esteemed Dr. Workman became superintendent in 1853. At that time there were only 300 patients. What the condition of the asylum was two years after it was opened (and I have reason to believe up to the time Dr. Workman became superintendent) I have the means of stating, on the authority of my brother, Mr. J. H. Tuke, who, on visiting it in 1845, made the following entry in his diary:—

" *Toronto, Sept.* 30, 1845.—Visited the lunatic asylum. It is one of the most painful and distressing places I ever visited. The house has a terrible dark aspect within and without, and was intended for a prison. There were, perhaps, 70 patients, upon whose faces misery, starvation, and suffering were indelibly impressed. The doctor pursues the exploded system of constantly cupping, bleeding, blistering, and purging his patients; giving them also the smallest quantity of food, and that of the poorest quality. No meat is allowed.

"The foreheads and necks of the patients were nearly all scarred with the marks of former cuppings, or were bandaged from the effects of more recent ones. Many patients were suffering from sore legs, or from blisters on their backs and legs. Every one looked emaciated and wretched. Strongly built men were shrunk to skeletons, and poor idiots were lying on their beds motionless, and as if half dead. Every patient has his or her head shaved. One miserable court-yard was the only airing court for the 60 or 70 patients—men or women. The doctor, in response to my questions, and evident disgust, persisted that his was the only method of treating lunatics, and boasted that he employs *no restraint*, and that his cures are larger than those in any English or Continental Asylum. I left the place sickened with disgust, and could hardly sleep at night, as the images of the suffering

patients kept floating before my mind's eye in all the horrors of the revolting scenes I had witnessed."

Dr. Workman reformed the asylum, and could an unvarnished tale be told of the condition in which he found and in which he left it, no better tribute could be paid to his character and work during the period he superintended it.

Dr. Workman now resides at Toronto, and has attained to nearly 80 years of age. His mind is still extraordinarily active; and his pen is frequently in his hand engaged in both original writing and in making translations from foreign Medical Journals. As longevity is in the family it is no mere form to express the hope that this Nestor of Canadian specialists may pursue his literary work for many years to come. In making Dr. Workman an Honorary Member of our Association at the last annual meeting, the latter honoured itself as well as him. In conversing with me on the provision required for the insane in Ontario, he gave it as his decided opinion that there had been an increase in their number beyond what either the increase of population or the accumulation of chronic cases could explain. Although the proportion of ascertained lunatics is about one to 700, Dr. Workman estimates that there is in reality one to 500. Formerly there was no general paralysis, now it is common enough; not so common, however, as in England, for at the Toronto Asylum there were not, at the time of my visit, more than a dozen cases; and there are only three or four deaths from this disease in the course of a year. Dr. Clark considers it more frequent among the better classes than the poor.

I visited with much interest the *London Asylum*, which Dr. Bucke superintends with great energy and enthusiasm. Not only is the town itself called after London, but the river upon which it stands is the Thames; and it boasts of its Westminster Bridge and its Piccadilly. The resemblance does not end here: for if it be allowed that there is a good asylum in or near our Metropolis, it will not be denied by anyone who inspects Dr. Bucke's institution that its analogue resembles it in this particular also. It was opened in 1870, and the present superintendent entered on his duties in 1877. The whole establishment, the main building, the separate one for the refractory patients, the cottages and the farm, convey the impression of active life, and of the sustained interest of an able head. Dr. Bucke has resolutely set himself to employ the patients in some way or other, especially on the farm—with great advantage, it need scarcely be said, to their mental and bodily health, and with the result of emptying the wards of those helpless, hopeless cases whose drear existence in the dead-alive asylums of any country suggests *cui bono* to the pessimist, and makes even the optimist sad at heart. If Dr. Bucke is asked how he employs a man in a state of acute mania, he replies, "Oh, I make him break stones."

Without taking the reply too literally, it may serve to show

the exceeding but just importance attached to labour or being out of doors, as has been so long and frequently maintained in the Mother Country. I gathered from enquiries that very few cases of mania with exhaustion are admitted to this asylum, a very important fact in this connection, which might have been expected as a point of contrast between the admissions into an asylum in old and new London. Mania in some form is about four times as frequent as melancholia. Only one patient was instrumentally fed last year.

The number of patients in this asylum is 888; 438 males and 450 females. It has a capacity for 906. The estate consists of 300 acres, 200 being occupied by the farm, 40 by the gardens, while the buildings cover the remainder.

The main building cost a little more than £100 per bed. (Land is here about £30 an acre.) It accommodates about 500 patients of both sexes of the quieter class and an assistant medical officer, Dr. Burgess, resides here. It consists of the usual arrangements —corridor (12ft. in width), recess, day, and bedrooms. Some of these are dormitories containing 16 beds. The number of single rooms in the whole establishment is 250. As I went through the men's side as many as 250 patients were at dinner in an associated dining-room. All had meat, and I found this was usual.

There is a distinct three-storied building for patients of a more or less excited character, male and female. The first assistant physician, Dr. Beemer, resides here. There is nothing special in the arrangement of the wards. There are 184 single bedrooms, affording 720 cubic feet of breathing space per patient. The windows were unnecessarily guarded by iron bars and net work. No doubt these are survivals of the past, and if rooms for the refractory were now built at this asylum, no trebly guarded window would be introduced, for it is out of character with the air of freedom which now everywhere prevails in the institution. More light would be also admitted into the building. There is a good airing court, shaded by trees, and provided with a shed and seats. In this asylum, as in most others on the other side of the Atlantic, the number of epileptics is small—only about 25. There was no patient in restraint and none in seclusion. Dr. Bucke observed that it was rare to have black eyes among the patients since he determined not to resort to mechanical restraint unless absolutely necessary. No patients were crouching on the floors in strong dresses. I must add that "chemical restraint" is not resorted to in the asylum. Sedatives are rarely given, even in small doses. In addition to the morning round, I went through the wards after the patients were in bed, and there was very little noise indeed. Before quitting this building for the excited patients I should state that, of 92 men residing in it, from 75 to 80 are on an average employed.

Dr. Bucke observes in his last report: "The disuse of all forms of restraint, and the employment of so large a proportion of the patients in the asylum, has been accompanied by (or has caused)

an unmistakable elevation of the tone of life throughout the whole institution; and as one evidence of the fact I may mention that the Sunday attendance at chapel has nearly doubled during the year just closed; a year ago the average attendance at Divine service on Sunday morning being about 260, and now over 400. . . . Along with the disuse of restraint and seclusion, we have almost entirely ceased using strong dresses, of which, up to within the last few months, we were in the habit of using a large number, and although we now use no restraint or seclusion, and hardly any strong dresses, we have less tearing of clothes and bedding, and breaking of furniture, etc., and far less striking and fighting on the part of the patients than when restraint and strong dresses were freely used. It should also be mentioned that we use absolutely no sedatives of any kind; and it is seldom indeed that any patient is held or restrained, even for a few minutes at a time, by the hands of attendants. The last fact was a very surprising one to me, for I had always believed that when mechanical restraint was discontinued in any asylum, manual restraint had to be substituted for it, and the chief argument which I have in former times used, and heard used, against the discontinuance of mechanical restraint, has always been that it was much preferable to restrain by the hand of an attendant, always wrongly taking it for granted that where the former was not used the latter must be."

In addition to the main building and the north or refractory branch, there are two excellent but cheaply constructed brick cottages, containing 60 patients each. The cost amounted to 32,000 dollars, or about £58 per bed. The patients in these cottages are either convalescent or able to appreciate the comparative independence of a separate house, not presenting any appearance of an asylum for the insane. The rooms were tastefully furnished and very clean.

There is still another cottage for 60 male patients—those who are particularly engaged in working on the farm. The cost was 18,000 dollars, being at the rate of a little more than £60 per bed.

As compared with most County Asylums in England, the furnishing of the main and north building struck me as somewhat scant. I am told that the patients of the class that go to the London Asylum are not accustomed to more at home in the way of carpets, &c., than they find when they come to the asylum. It is true, also, that they are so much out of doors that they may not care much for somewhat bare corridors and rooms. The cost per head for maintenance amounts to 105 dollars 12 cents, or about £21 a year; this includes, in addition to food, salaries and furniture, but not any considerable repairs or the additional buildings—certainly a low figure—and it should be mentioned that about 80 per cent. of the patients are clothed by the institution. I have already said that the total cost per annum of patients at the London Asylum amounts to 145 dollars 12 cents, or 2 dollars 79 cents per week. The above charge for maintenance is no doubt kept down by the large yield from the farm

and garden, although the total cost is greater than in any asylum in Ontario. I wished to ascertain the exact extent of this, but the accounts at the Superintendent's command did not show it, nor was the Inspector, Dr. O'Reilly, able to put me in the way of obtaining this information valuable and interesting as he felt it to be. A clear estimate of the net profit would greatly redound, I doubt not, to the credit of the institution, and the strenuous endeavour made to have a profitable farm connected with an asylum for the insane. Dr. Bucke drove me over the farm. Its produce and that of the gardens were roughly estimated by him at about £3,000 a year. There were 200 pigs on the day I was there. Over 100 are killed every year. Some 6,000 bushels of potatoes are raised annually, and as many quarts of berries from the gardens. Last year the crop of hay amounted to 140 tons. The asylum has 40 cows.

As none of the patients pay a cent (for it is a genuine pauper asylum), it is doubtless easier to induce them to work than in mixed institutions, and also to find men accustomed to farm, and to be handy at various trades. To compare the amount of work done at such an institution with one for private or mixed patients would be very unfair. It will not, however, be denied that there are some pauper institutions in the world in which the patients do little or no work from year end to year end, and spend a much larger proportion of the day in the wards of the asylum than out of them. Nor is it altogether impossible that there are institutions of a mixed class in which the patients might do a little more work both indoors and out, especially the latter, than they do already. In this I include the constant attempt to induce the patients to take exercise in the open air with as definite an object as possible. This can only be effectually done by a superintendent who has his heart in the work, and who will insist upon having a sufficient staff of attendants, even on the score of economy, should those who hold the purse-strings be deaf to an appeal to higher motives. But what if there is no breathing space outside the walls of the asylum? Then, woe betide the superintendent and the unhappy patients under his care. Their fate is sealed.

On examining the record of work, and taking a single day, I found that out of the 438 men no less than 392 were employed; while out of 451 women, 404 were occupied in some sort of work. Of 40 that do not work, 25 are physically incapable, and 15 cannot be induced to work without more pressure than it is thought right to use. I am well aware that figures like the above may mean much or little, but I am satisfied from personal observation that in this instance they mean much.

It is especially interesting to observe how a better system of treatment has become possible by the increased employment of the patients. With 880 patients the average number at work was, at the date of Dr. Bucke's last report, 625. He observes: "I have always found that, no odds how violent a patient is, if you can once get him or her to work, the case will give you very little further trouble in that way. . . . The male patients have been engaged in all the

various kinds of farm and garden work ; they work with the carpenter, mason, painter, tailor, engineer, baker and butcher ; they work in the horse and cow stables, and do most of the milking ; they assist in dining-room, kitchen and laundry ; they sew, knit, make and mend shoes, boots, and slippers ; seat chairs with cane and reed ; make mats ; they do tinsmithing, blacksmithing, locksmithing, upholstering, clerking ; all kinds of work in the halls, as bed-making, sweeping, scrubbing, sawing and splitting wood, shovelling coal, grading land, making roads, feeding and tending two hundred pigs, working in the store, picking hair for mattresses, and doing all sorts of odd jobs. The female patients are largely engaged in sewing and knitting ; and, besides, they work in the kitchen, laundry, and dining-rooms ; do all sorts of work in the halls, as bed-making, sweeping and scrubbing ; milk, pick hair for matresses, and gather fruit and vegetables in the gardens."

The proportion of attendants to patients is certainly not high in the London Asylum ; in fact, the Province ought not to complain if the Superintendent should increase the number. For the violent patients, the proportion was one in nine—considerably less for the others. It ought, however, to be remembered that the number of ward attendants does not adequately represent the services rendered to the patients, inasmuch as those workmen who labour on the grounds or at any handicraft exercise surveillance over some of the patients at the same time. Several years ago, Dr. Eames, the President of the Medico-Psychological Association, urged upon his Committee the need of more attendants, and he states that while the proportion of attendants, with the above-mentioned helps, was one to eleven in his asylum, it averaged about one to eight in the asylums of Ireland generally. The maximum pay of male attendants at the London Asylum is about £50 a-year ; that of the females is about £30. On the male side are several female attendants—not the wives of attendants, as at Brookwood and some other asylums in England, but respectable widows. Dr. Bucke attaches great importance to this feature of his management, as ensuring cleanliness, tidiness, and consideration. He states that he has had no difficulty in finding suitable persons. He is fortunate, for he requires pleasant manners, industrious habits, good feeling, and, above all, good sense, in addition to widowhood. They must be widows indeed. To do him full justice, however, I must cite a few passages from his last annual report :—

"The first was engaged in January, 1883, and became the supervisor of the upper storey, and does all the work that a man in that position would do, and besides that she has a general supervision over the tidiness and cleanliness of the whole wing ; the other two women act as her assistants on the other two flats. They look after the men's clothing, see to the tidiness of the beds, cleanness of the floors, &c. &c. ; and, especially, they oversee the indoor work of a large number of male patients, who pick hair, sew, knit, make mats, &c. But the active duties of these women, though important, are scarcely

so valuable as is their mere presence in the halls, which has a strong tendency to check improper and unseemly talk and conduct, so that these halls are different places now from what they used to be before these women took service in them. . . . Down to the present time none of them have been by speech or action either injured or insulted by any patient. Almost universally the patients like to have them amongst them, and I find that often the women can get the patients to work when the male attendants can get them to do nothing."

In an institution where the gospel of fresh air and employment is so fully believed in and carried out, one feels especially interested in the dietary. The meals are taken at 6.30 a.m., 12, and 6 p.m., the patients going to bed after supper up to 9 o'clock p.m. I append the dietary in detail, but must premise that work, whether out or indoor, is not encouraged by the stimulus of beer, for Dr. Bucke is an out-and-out teetotaler. He has not used alcohol in any form, even as a medicine, for three years. When he became Superintendent a considerable sum was expended on beer ; more food is now given, but not more milk, which is, I think, to be regretted. The attendants never had any beer, so no money equivalent has been necessary.

The dietary in the main asylum on a particular day which I chose, viz., June 8th, 1884, was as follows :—

BREAKFAST.

Sunday.—Bread and butter, tea and coffee.
Monday and Wednesday.—Porridge and milk.
Tuesday.—Boiled rice and syrup.
Thursday.—Oatmeal porridge and syrup.*
Friday and Saturday.—Porridge and milk.

DINNER.

Sunday.—Stew, potatoes.
Monday.—Corn-beef, potatoes and beans.
Tuesday.—Roast beef, potatoes, bread pudding.
Wednesday.—Boiled beef, potatoes and peas.
Thursday.—Haricot, potatoes, and bread pudding.
Friday.—Fish, boiled beef, pickles and potatoes.
Saturday.—Roast beef, potatoes, bread pudding.

TEA.

Sunday.—Bread and butter.
Monday and Saturday.—Bread and butter.
Tuesday.—Stewed rhubarb.
Wednesday.—Bread and butter.
Thursday.—Currant rolls.
Friday.—Apple sauce.

With the foregoing may be compared the dietary of an English pauper asylum, that at Hanwell :—

BREAKFAST.

For males.—Cocoa, bread and butter.
For females.—Tea, bread and butter.

* Molasses.

DINNER.

Sunday.—Roast pork, beef, or mutton.

Monday.—Soup, thickened with oatmeal, rice, and peas, and containing 2 oz. of meat for each patient; also 6 oz. currant pudding or 10 oz. baked rice pudding.

Tuesday.—Meat pies.

Wednesday.—St. Louis corned beef.

Thursday.—Boiled bacon or pickled pork.

Friday.—Fish, fried or boiled, with melted butter.

Saturday.—Irish stew.

SUPPER.

Tea, bread and butter.

For patients who are employed, luncheon, consisting of bread and cheese and beer (half-pint), is provided in addition; and for Monday's dinner, boiled bacon or pickled pork is given instead of soup.

The following are the principal salaries and wages allowed at the London Asylum :—

MALES.—Medical superintendent, £420; first assistant physician, £210; second ditto, £210; third ditto, £154; bursar, £290; steward and storekeeper, £166; engineer, £154; two carpenters, £220; tailor, £94; gardener, £83; assistant ditto, £50; butcher, £50; baker, £83; farmer, £125; two ploughmen, £115; cowman, £45; three night-watchmen, £157; three chief attendants, £195; twenty-nine ordinary male attendants, £1,389.

FEMALES.— Matron, £105; assistant ditto (refractory ward), £52 10s.; chief attendant, £52 10s.; thirty ordinary female attendants, £990; three night attendants, £82; five cooks and assistant cook, £137; five laundresses, £115; nine housemaids, £195; one dairymaid, £25; two seamstresses, £50.

With the foregoing may be compared the following salaries, &c., at the Hanwell Asylum (750 men, 1,143 women) :—

OFFICERS.—(*a*) Resident medical superintendent (female department), £700 per annum; (*a*) resident medical superintendent (male department), £700; (*d*) chaplain, £350; (*f*) clerk to the Committee of Visitors, £275; assistant medical officer, £200; ditto, £200; ditto, £165; ditto, £150; (*e*) apothecary, £120; (*b*) engineer, £450; (*a*) storekeeper, £500; (*e*) clerk of the asylum, £325; (*e*) first assistant clerk, £130; (*c*) second assistant-clerk, £110; (*e*) storekeeper's clerk, £110; ditto, £60; outdoor inspector, £74; (*e*) matron, £345; assistant matron and organist, £66; junior assistant matron, £40; superintendent of laundry, £55; superintendent of workroom, £50; principal female attendant, £36; ditto, £34; ditto, £30; workroom assistant, £33.

(*a*) Furnished house, rates and taxes free, coals, gas, milk, and vegetables; (*b*) part ditto, ditto, ditto, washing, milk, and vegetables; (*c*) furnished apartments, attendance, coals, gas, washing, milk, and vegetables; the matron boards two servants; (*d*) unfurnished house; (*e*) dinner daily; (*f*) neither boarded nor lodged. The others have board, lodging, and washing.

(*a*) Male Attendants.—(*b*) Three supervisors, at £80; (*c*) eighteen charge attendants, £25 to £40; forty-four ordinary ditto, £25 to £35; hall attendant, £40; (*d*) six night ditto, £62 to £72.

(*a*) One suit of uniform every eight months, and a suit of serge every two years under certain conditions; (*b*) do not reside in asylum; (*c*) have board, lodging, and washing, except in the case of some of the attendants, who are allowed £1 per month in lieu of their lodging and washing. Three out of the eighteen receive £47. (*d*) These attendants are neither boarded nor lodged.

(*a*) Female Attendants.—Four supervisors, £30 to £39; twenty-five charge attendants, £15 to £29; eleven night ditto, £19 to £32; seventy-one ordinary attendants, £15 to £25.

(*a*) All have board, lodging, and washing; three suits of uniform every eight months.

(*a*) Kitchen and Laundry.—One head cook, £46; one assistant ditto, £26, with three suits of uniform every eight months; one ditto, £20, with ditto; two kitchenmaids, £14 to £20, with ditto; one head laundress, £20 to £25, with ditto; one assistant ditto, £18 to £25, with ditto; one officers' ditto, £18 to £25, with ditto; eleven laundry maids, £15 to £25, with ditto; seven domestic servants, £14 to £20.

(*a*) All board, lodging, and washing.

Workmen.—One upholsterer, £1 12s. per week; one ditto, £1 4s.; two ditto, £1 and 18s.; two tailors, £1 8s. and £1 4s.; one tailor, £1; two shoemakers, £1 10s. and £1 3s.; one tinman, £1 9s.; one basket-maker, £1 7s.; (*a*) one butcher, £1 4s.; (*b*) two bakers, £1 6s. and 17s.; (*c*) one gardener, £1 16s.; one ditto, £1 4s.; (*d*) one carter and driver, £1; one carter, £1; one cowman, £1 1s.; one ditto, 18s.; one gardener (front grounds), £1 1s.

(*a*) Breakfast and dinner daily; (*b*) boarded, &c.; (*c*) allowed vegetables; (*d*) lodged and allowed coals, gas, milk, vegetables, and beer. All have an allowance of beer.

I next visited the *Hamilton* Asylum. This institution, opened in 1875, is beautifully situated, overlooking Lake Ontario at the point of Burlington Bay. The situation, however, is not altogether advantageous. It is inconveniently near a precipitous descent, and the approach to the asylum is troublesomely steep. It was originally designed for an inebriate asylum, but the needs of the insane were justly deemed more pressing and practical than those of dipsomaniacs.

Dr. Wallace is the medical superintendent. Unfortunately he has been out of health for some time, for which he has had to travel abroad, but he is now much stronger.

There are 567 patients in the house, of whom 270 are males and 297 females. About 5 per cent. of the patients pay, but only from 6s. to 10s. a week. The construction of the building is on the ordinary asylum plan, and is a handsome structure. The superintendent's house is distinct from, but close to, the institution. When I was going round a number of patients of both sexes were dining together

—105 men and 95 women. The dietary was good. The heating and ventilation of the house, the former by steam and the latter by flues to the roof, are well secured.

In the refractory galleries the least excited patients are, I was glad to observe, placed in the upper storey. Frequently in asylums on the American Continent the most violent are placed at the very top of the house, a practice very likely to involve neglect and the omission of proper outdoor exercise. The bringing of this class of patients up and downstairs is in itself a frequent cause of outbursts of excitement and struggling.

With regard to restraint, Dr. Wallace informed me that when he regarded it necessary he employed leather muffs for the men and the camisole for the women. Were a patient actually suicidal, he would at night, if not in the day, be placed in restraint, while a more intelligent patient would be placed in the same room. Some months had elapsed since a male patient had been restrained. A woman at the time of my visit was in restraint who persistently mutilated her face. When the camisole was removed she immediately resumed her injurious work. Judging from the reports of the Inspector, I should conclude that there has been a remarkable diminution of restraint during the last few years.

On the female side there is a sewing-room, where many of the patients work. All the sewing required by the institution is done here. As I am speaking of employment, I may add that for the male patients, in addition to other work, it is found convenient to employ them in winter, when it is more difficult to supply employment, in breaking stones under a shed.

The following is a statement of the employment of patients during the quarter ending June 30th, 1884:—

FEMALE PATIENTS.

Nature of Employment.	Number of Patients Working.	Number of Days Worked.
Laundry	15	1170
Kitchen	7	546
Sewing-room	12	936
Dining-room	13	1014
Mending	6	468
General Work ...	5	390
Knitting	30	2340
Work in Halls ...	35	2745
Store-room	8	624
Total	131	10233

MALE PATIENTS.

Nature of Employment.	Number of Patients Working.	Number of Days Worked.
Laundry	5	390
Kitchen	5	455
Tailor's Shop... ...	2	147
Dining-rooms ...	8	728
Carpenters	6	292
Engineers	4	281
Masonry	12	465
Roads	12	322
Coal and Wood ...	20	849
Bakery	1	78
Dairy	6	546
Butcher	1	91
Piggery	2	182
Painting	2	112
Farm	12	524
Garden	20	745
Grounds	6	211
Stable	1	91
Halls	60	5460
Store-room	2	156
General Work ...	25	1652
Quarry	50	1400
Total	262	15177

In the refractory galleries on the men's side the number of the attendants was certainly too few. However, not only was no patient in restraint, but none were in seclusion or in a strong dress. A separate building for a certain number of the refractory class has been erected, and will be shortly occupied. This is another illustration of the tendency there is to adopt the plan of separation of classes of patients which has been carried out for some years in Great Britain. It is a neat red-brick building, with a limestone basement, and consists of a centre and two wings, having two storeys. It will accommodate 60 men. The cost seems high compared with some of the separate buildings which I have mentioned, viz., £120 a bed, but this is due to the class of cases for which the building is designed being acute instead of chronic. There are rooms on both sides of the corridors. The single rooms are well adapted for their purpose, but the provision for ventilation appears to be scarcely sufficient. The construction of the building readily admits of separating the noisiest from the less noisy patients, and also for placing patients on admission under special observation if desirable. When the building is occupied, an assistant medical officer is to be resident in this building.

He has not yet been appointed. Should a false economy prevent his appointment, the separation of this the most important class of the insane from the rest of the household, still further removed as they will be from the superintendent's quarters, will be an evil instead of a blessing. That such an evil is not imaginary I can assert from what I have witnessed in some Continental asylums, where the paramount idea seems to be to remove violent and dirty patients as far as possible from the centre of the asylum, and that without any medical officer.

There are objections, doubtless, to placing maniacs close to the central offices, but of the two evils I am sure that for the interests of the patients, to whom every other consideration ought to be sacrificed, this arrangement is better than putting them beyond the reach of sound and sight. I was glad to find that at the Hamilton Asylum an assistant medical officer resides in the main building near the wards for the refractory male patients. It is to be regretted that this is not the case in every institution for the insane in which acutely excited patients are admitted. He ought to be cognisant of noise if it is unusual, and to be within easy call. It will be said that the appointment of night-watches renders abuses or neglect impossible. This I entirely deny. No asylum is free from the possible, or rather probable, ill-treatment of patients when out of sight of the heads of the institution, but at no time is this so likely to occur as with the violent class during the night and early morning, for then it is that the patients and their attendants are least under observation.

There is another cottage on the ground, which was, I understand, formerly occupied by the bursar. This is now occupied by 19 female patients of a harmless kind. It looked home-like and clean, and the inmates, who were quite of a humble class, seemed very comfortable and contented. This cheerful cottage might be used for the convalescent class. It is comparatively inexpensive.

The attention paid to the dirty patients is highly creditable. The night-watches carry out the system of getting this class up to the fullest possible extent. I looked at the reports handed in to the superintendent in the morning, and found the number of reported soiled beds remarkably few. On the day I was at the asylum there were only two on the female and one on the male side. There are four night-attendants. I also examined many of the beds when passing through the dormitories, as also did Dr. Ashe, of the Dundrum Asylum, who happened to join us in our round, and we were struck with the cleanliness of the bed-linen in the division where it was most likely to be foul. I may state that only five men in this asylum were the subjects of paresis, and two women. Hence, as compared with an asylum in England of the same size, the number of patients likely to be dirty would be much smaller.

No alcohol is used at this asylum except medicinally, and that rarely. Formerly beer was an article of diet. When discontinued milk was given as a substitute when the patients desire it. No money

equivalent was given to the attendants. Their salaries reach £50 for men and £25 for women per annum.

The last asylum I visited in Ontario was that at *Kingston.* In the absence of the superintendent, Dr. Metcalf, his brother-in-law, Dr. Clarke, the assistant medical officer, obligingly showed me over the institution. It is situated on the north bank of Lake Ontario. There are 255 male and 250 female patients. These 505 patients are paupers, with the exception of a very few who pay the cost of maintenance, viz., two dollars, or nearly 8s. 6d., a week. The asylum, which is of stone, was opened in 1859. It is built in the usual corridor style, and has four storeys in addition to the basement, which is not used for the patients. There are 180 single rooms, 90 of which are for the worst class. The associated dormitories have not more than 11 beds in any one of them. The breathing space per patient amounts to 1,034 cubic feet in the former and 700 in the latter. In this asylum the suicidal patients are scattered in dormitories with other patients on whom reliance can to a considerable extent be placed. In addition, the attendants' door opens into the dormitory, and the night-watch looks in every hour. There has been no suicide since 1877.

The estate covers 140 acres, 85 being devoted to the farm and garden, on which patients are employed. Eight look after the cattle ; 25 work on the roads ; five assist the engineers ; two are carpenters, two painters, three tailors, two shoemakers, two bakers ; two assist in the kitchen ; and 160 are employed in the wards. Of the women, upwards of 150 are employed.

I was glad to see here, as at the other asylums in Ontario, cottages for certain classes of cases. One cottage was occupied by 37 women of the quiet and incurable class. An annexe, only opened this year, for 70 patients of both sexes, and built of limestone, cost 30,000 dollars, including warming apparatus and furnishing, or about £100 per bed. There are no single rooms in the house. The centre consists of four and the wings of three storeys. At the present time it is full.

The general appearance of the patients at this asylum was very satisfactory. Evidently they are under kind and skilful management. The asylum is inspected four times a year by Dr. O'Reilly and nominally by the Grand Jury at the Assizes.

It is a matter of some interest to be able to compare the salaries given to the staff in an asylum in Canada with those allowed in England. For this purpose I append the salaries of the officers at the Kingston Asylum :—

Medical superintendent, £333, with house, rations for himself and family, &c., &c. ; assistant medical officer, £210, with like extras ; bursar, £240, dinner on the premises ; steward, £100, with house, rations, &c. ; storekeeper, £100, dinner on the premises ; engineer, £155, with house and garden ; assistant-engineer, £83, with meals and lodging, and stoker, £60, with meals and lodging ; farmer, £72, with house, garden, and meals ; gardener, £83, with house and garden ; ditto vegetable garden, same ; butcher, £50, with house

and garden and meals; baker, £83, with like extras; tailor, £83, with meals; carpenter, £90, with ditto; the night-watch (male side), £72, with meals; female night watch, £50, with meals; head male attendant, £83; ten attendants, £72 each, and eight attendants, £50; matron, £83, with rooms, rations, &c.; assistant-matron, £41 10s., with like extras; thirteen female attendants, £25; two night-watches, ditto; laundress, £30, with meals; assistant-laundress, £25; cook, £30; under-cook, £25; dairymaid, £20; two domestics, one at £25 and the other at £20.

In no case can a claim be made for a pension, which must be borne in mind in contrasting these figures with those of English asylums.

For the sake of comparison I add the following table from the last report of the Portsmouth Borough Asylum (England), where the patients number 450:—

Officers.—Medical superintendent, £480 per annum, with unfurnished residence, light, fire, garden produce, milk and washing; assistant medical officer, £120 per annum, with board, furnished apartments, gas, coal and washing; chaplain, £180 per annum, non-resident; clerk of the asylum and steward, £200 per annum, non-resident.

Attendants (male department).—One head attendant, £40 per annum, with board, lodging, washing and uniform; three night attendants, 18s. 6d. per week, with one meal per night, non-resident; one charge attendant £30 per annum, one ditto £27, two ditto £26 10s., one ditto £25, each with board, lodging, washing and uniform; one second class attendant £25, two ditto £23 10s., two ditto £23, each with board, lodging, washing and uniform; one third class attendant £23, one ditto £22, six ditto £21, each with board, lodging, washing, and uniform; one hall porter £27, one ditto £19 5s., each with board, lodging, washing and uniform.

Nurses (female department).—One housekeeper and chief nurse, £55 per annum, with furnished apartments, board, washing, &c.; one organist, £30 per annum, with ditto; one needle mistress, £27 per annum, with board, lodging, washing and uniform, one night nurse, 14s. per week, with one meal per night, non-resident; one night nurse £21 per annum, one ditto £21 10s., each with board, lodging, washing and uniform; one charge nurse £24, four ditto £22, one ditto £21, one ditto £20, each with board, lodging, washing and uniform; two second class nurses £24, two ditto £20, one ditto £19 10s., one ditto £19, each with board, lodging, washing and uniform; two third class nurses £17 10s., two ditto £17, one ditto £16 10s., six ditto £16, each with board, lodging, washing and uniform.

It is stated in the last report of the Kingston Asylum that the value of the produce of the farm and garden amounted to upwards of £1,370. Two hundred and twenty three patients performed 57,244 days' work during the year. When I visited this asylum, a circumstance which had just occurred displays in its after-history a curious condition of Canadian law. A male patient escaped from the asylum

and made a criminal assault, for which he was arrested and tried. Incredible as it may seem, the opinion of the medical superintendent of the asylum was never sought. He was found guilty, and sentenced to six months' hard labour in jail without the question of the prisoner's insanity being gone into. The Judge stated that he must be lenient under the circumstances, but what these were have not been stated. Having read the history of his case, I should regard him as a most dangerous lunatic, and should be surprised if he does not commit some frightful crime when he regains his liberty. It is difficult to understand why he was not placed in the criminal asylum, where he would certainly have been prevented doing any injury to society.

I am informed that in the old Lunacy Act (prior to 1871) there was a clause which should not have been repealed, viz., the provision made for the detention of criminal lunatics in the criminal asylum as soon as their sentences expired. At present the asylum-authorities are forced to receive all criminal lunatics and insane criminals belonging to the province of Ontario at the time their sentences have expired. This state of affairs is, as might be expected, most unfortunate for the Kingston Asylum, for it is made the repository for all these criminals, and their influence is anything but salutary.

I append the dietary table at the Kingston Asylum for one week in July of this year :—

Days of Week.	Breakfast.	Dinner.	Tea.
Monday ...	Rice and milk. Coffee, bread and butter.	Barley soup. Beef, potatoes and bread.	Tea, bread and butter.
Tuesday ...	Porridge and milk. Coffee, bread and butter.	Roast beef, potatoes, and bread.	Cheese. Tea, bread and butter.
Wednesday ...	Cold meat. Coffee, bread and butter.	Barley soup. Beef, potatoes and bread.	Rhubarb. Tea, bread and butter.
Thursday ...	Porridge and milk. Coffee, bread and butter.	Plum pudding. Roast beef, potatoes and bread.	Tea, bread and butter.
Friday ...	Porridge and milk. Coffee, bread and butter.	Boiled fish. Beef, potatoes and bread.	Buns. Tea, bread and butter.
Saturday ...	Porridge and milk. Coffee, bread and butter.	Pea soup. Pork, beef, potatoes and bread.	Tea, bread and butter.
Sunday ...	Coffee, bread and butter.	Beans. Roast beef and bread.	Rhubarb. Tea, bread and butter.

With this dietary may be compared that of the Portsmouth Borough Asylum (England), which is probably above the average dietary of County and Borough Asylums :—

BREAKFAST (daily).

Males.—8ozs. bread, ½oz. butter, 1 pint tea, coffee or cocoa.

Females.—6ozs. bread, ½oz. butter, 1 pint tea, coffee or cocoa.

SUPPER (daily).

Males.—8ozs. bread, 2ozs. cheese or ½oz. butter ; 1 pint tea.

Females.—6ozs. bread, 2ozs. cheese or ½oz. butter ; 1 pint tea.

DINNER.

Sunday.—16 to 18ozs. suet pudding, with treacle sauce, and the addition of fruit in the summer and dried fruit in the winter—males and females. 3ozs. of meat where ordered.

Monday.—5ozs. meat, males and 4ozs., females ; vegetables not less than 1lb.

Tuesday.—3ozs. tinned meat, males and females ; vegetables as on Monday.

Wednesday.—2 pints soup, 2ozs. meat, 5ozs. bread—males. 1½ pint soup, 4ozs. bread—females.

Thursday.—Meat pie, 12ozs.—males ; 10ozs.—females. ½lb. potatoes or ½lb. of other vegetables.

Friday.—Same as Monday.

Saturday.—1lb. fish, males and females ; vegetables same as Monday.

Half-pint of ale daily for dinner, except on Wednesday, for both males and females.

Women working in laundry have bread and cheese and half-pint of ale for lunch, with meat and ale for dinner on Wednesday ; also extra tea at 3 p.m.

Women scrubbing in wards have bread and cheese daily for lunch, with half-pint of ale. Men the same.

Men working in the shops or on the farm have half-pint of ale and bread and cheese at 10 a.m., and ale at four o'clock.

Meat pie contains 3ozs. of meat without bone for each patient. Soup is made from liquor of boiled meat, thickened with pearl barley, &c., to which are added vegetables, herbs, &c.

From the asylum I proceeded to visit the Penitentiary, which is in the vicinity, accompanied by Dr. Clarke. Mr. Creighton, the warder, who showed me over, is a very kindly gentleman. The prison appears to be in excellent order. There is a separate modern building for 43 criminal lunatics. The number on the day of my visit was 37. The character of the cells is, I am sorry to say, similar to those of a prison, and, so far as I could judge, the patients are treated with almost as much rigour as convicts, though not dressed in prison garb. This is wrong. Either they are or are not lunatics. If they are, they ought to be very differently cared for, while every security to prevent escape is taken. In the basement are "dungeons," to which patients

are consigned when they are refractory as a punishment, although the cells above are in all conscience sufficiently prison-like. The floors of the cells are of stone, and would be felt to be a punishment by any patient in the asylums of Ontario.

In a day-room above the ground floor a number of patients were congregated, moody and apathetic. Some were in mechanical restraint.

Two men in the cells had once been patients in the asylum. One, with whom we conversed at the iron gate of his dungeon, laboured under a distinct delusion of there being a conspiracy against him. It was certainly not very likely to be dispelled by the dismal stone-floor dungeon in which he was immured without a seat, unless he chose to use the bucket intended for other purposes, which was the only piece of furniture in the room. Surely something will be done to terminate a condition of such unnecessary hardship. For criminals of the worst class this building is no doubt admirably suited, but it is astonishing that it should have been constructed for lunatics in recent times. In these remarks no reflection is for a moment cast on the excellent Warden of the Penitentiary. As to what the Visiting Medical Officer does in the medical treatment for these patients, or to secure their comfort, I shall not attempt to give an opinion.

I hasten to remark that the Penitentiary is not under the control of the Province, but the Dominion; otherwise, judging from the asylums of Ontario, it would, I have no doubt, be in a totally different condition.

It will thus be seen that the Province of Ontario possesses in its Asylums excellent institutions, in which modern views and the results of experience in other countries are vigorously and intelligently applied; in which employment is being carried out more and more to the extent consistent with the comfort of the patients; in which mechanical restraint is not resorted to unless every other means have failed, and in which a good example of segregation is exhibited, the usually constructed asylum being supplemented by an annexe or cottages adapted for particular classes. That such a system as this works well, no one who has seen it in operation in British or other asylums will be surprised to hear.

Province of Quebec.

On the 30th of August last I visited the lunatic asylum at Longue Pointe, seven miles from Montreal, called the *Hospice des Alienés de St. Jean de Dieu.* It was built by the Sœurs de Providence, and opened in 1876. The Province of Quebec contracts with them to maintain the lunatic poor* in one of the two parts of the Province

* At the rate of 100 dollars or £20 per annum per head at Montreal and 130 dollars at Quebec—a very insufficient sum, it would seem, for board, lodging and clothing. I understand that the money originally borrowed of the Provincial Government by the Montreal Asylum has been refunded, and that money has been borrowed from private quarters to assist in the erection of the additional buildings.

into which it is divided; the asylum at Beauport, near Quebec, providing similarly for the other district. Private patients are admitted. The building—which, surmounted by three cupolas, is a prominent object from the St. Lawrence in approaching Montreal from Quebec—is built of red brick, and consists of a centre and wings. Some of the latter have been added three or four years ago; others are now in course of erection, and will not be finished till the end of the year. Dr. Henry Howard, the visiting physician, kindly facilitated my desire to see the asylum, and escorted a small party, consisting of Dr. Ross of Montreal, Dr. S. Mackenzie of London, and myself, to the institution. I must express to Dr. Howard my lasting obligations for his attention and assistance. We were received by the Mother Superior, Ste. Thérèse, who had been apprised of our visit. She conducted us through the building, and was most courteous in her manner and in replying to the numerous questions with which I troubled her. I am glad to have this further opportunity of thanking her and the nuns for their kindness throughout the visit.

The neatness and cleanliness of the hall, reception-room and office strike the visitor very favourably on entering the establishment. The *Apothecaire* is a model of neatness. The nuns have themselves published a pharmaceutical and medical work, a large volume, entitled "Traité Elémentaire de Matière Médicale et Guide Pratique," a copy of which the worthy Mother Superior was good enough to present to me. I was somewhat disappointed to find, on examining its pages, that only one was devoted to mental alienation, of which nine lines suffice for the treatment of the disorder. Among the moral remedies, I regret to see that "punitions" are enumerated; their nature is not specified. Two skeletons in the *Apothecaire* were shown to us by Ste. Thérèse, as being much valued subjects of anatomical study for the nuns, who would, it is not unlikely, consider their knowledge of the medical art sufficient for the needs of the patients. The law, however, obliges a medical man to reside in or near the asylum. Dr. Perrault, whom we did not see, occupies this post. This officer is appointed and paid by the Sisters; the visiting physician, on the contrary, is appointed and paid by the Provincial Government. We looked down upon a very large kitchen, where cooking by steam was going actively on, and a favourable impression as to the supplies was left upon the mind by the busy scene which presented itself. The amount of vegetables (potatoes, turnips, cabbages, &c.) produced on the land, is very large—more potatoes, I believe, than they consume. Maize, wheat, oats and buckwheat are raised. The estate consists of 600 acres. There are a large number of cows, and the asylum buys beasts to fatten and kill, thereby saving a considerable sum. I was informed that about fifty patients were usually employed out of doors, and more in harvest time. That such an establishment should be conducted by nuns must seem remarkable to those who are unacquainted with the large part taken by Sisters of Charity in the management of hospitals

in countries where the influence of the Roman Catholic Church extends. Theoretically, it would seem to be an admirable system, and to afford, in this way, a wide field for the employment of women in occupations congenial to their nature, and calculated to confer great advantages upon the sick, whether in mind or body. That women have an important *rôle* in this field will not be denied; but experience proves only too surely that to entrust those of a religious order with administrative power is a practical mistake, and leads to abuses which ultimately necessitate the intervention of civil power.

The asylum consists of a succession of corridors and rooms similarly arranged, there being dining rooms, recesses, and single and associate dormitories. There are four stories uniform in construction, exclusive of the basement and the rooms in the roof, and these four are supplied with open outer galleries or verandahs, protected by palisades. The lower stories are clean and well furnished, and the patients appeared to be comfortable. The apartments of the private patients were, of course, the best furnished. It was curious to see in the day rooms on the male side a nun with a female assistant. They are in the wards all day, and sleep together in another part of the building. In the refractory ward for men there were two male attendants, and in the other wards one male attendant, in addition to the two females. In each ward on the women's side there were two assistants with the nun in charge, and in the refractory gallery there were three assistants. The nuns and female assistants are not paid. The corridors, the width of which was fair, were carpeted down the centre, and there were pictures on the walls in considerable number. In the day-rooms, on the floors of which was oilcloth, the furniture, though simple, was by no means insufficient. In the recesses of the corridors, as well as in the corridors themselves, were seats for the patients. Although there were rooms on both sides of the corridor, the latter was fairly lighted by the recesses, &c. The dormitories were very clean, and presented a neat appearance; the beds were of hair, and a bright-coloured counterpane had a pleasing effect. Single rooms, used as bed and sitting room, were very neatly furnished, and had every appearance of comfort. For paying patients, and for a considerable number of the poorer class, I have no doubt the accommodation is good, and as I must shortly speak in terms of strong reprobation, I have pleasure in testifying to the order, cleanliness, and neatness of those parts of the building to which I now refer, and which we went over in the first instance.

It is as we ascend the building that the character of the accommodation changes for the worse. The higher the ward, the more unmanageable is the patient supposed to be, the galleries and rooms become more and more crowded, and they look bare and comfortless. The patients were for the most part sitting listlessly on forms by the wall of the corridor, while others were pacing the open gallery, which must afford an acceptable escape from the dull monotony of the

corridor. The outlook is upon similar galleries in the quadrangle at the back of the building, and to a visitor, the sight of four tiers of palisaded verandahs, with a number of patients walking up and down the enclosed spaces, has a strange effect. These outside galleries are, indeed, the airing courts of the asylum. There are no others. If the patients are allowed to descend, and to go out on the estate, they usually do so in regular order for a stated time, in charge of attendants, like a procession of charity school children. Those who work on the farm must be the happiest in the establishment.

In the fourth tier were placed the idiots and imbeciles—a melancholy sight necessarily, even when cared for and trained in the best possible manner, but especially so when there is no attempt made, so far as I could learn, to raise them to a higher level or educate them. If, however, they are kindly treated and kept clean, I should feel much less regret for educational neglect than I should feel pained by the state of the patients and their accommodation in the parts of the establishment next described. Far be it from me to attribute to these Sisters of Charity any intentional unkindness or conscious neglect. I am willing to assume that they are actuated by good motives in undertaking the charge of the insane, that they are acute and intelligent, and that their administrative powers are highly respectable. Their farming capacities are, I have no doubt, very creditable to them. It is not this form of farming to which I have any objection or criticism to offer. In the vegetable kingdom I would allow them undisputed sway. It is the farming out of *human* beings by the Province to these or any other proprietors against which I venture to protest.

It is impossible to convey an adequate idea of the condition of the patients confined in the gallery in the roof, and in the basement of this asylum. They constitute the refractory class—acute and chronic maniacs. They and the accommodation which has so long been provided for them must be seen to be fully realized. To anyone accustomed to a well-ordered institution for the insane, the spectacle is one of the most painful character. In the course of seven-and-thirty years I have visited a large number of asylums in Europe, but I have rarely, if ever, seen anything more depressing than the condition of the patients in those portions of the asylum at Longue Pointe to which I now refer. I saw in the highest storey, that in the roof, an ill-lighted corridor, in which at least forty refractory men were crowded together ;* some were walking about, but most were sitting on benches against the wall or in restraint-chairs fixed to the floor, the occupants being secured to them by straps. Of these seated on the benches or pacing the gallery, a considerable number were restrained

* I substitute this figure for that originally given, in consequence of the statement of one of my critics. I conclude that this number *sleep* in the roof, and that the others whom I saw occupy beds in the storey below. Of course the number of refractory men patients greatly exceeds 40.

by handcuffs attached to a belt, some of the cuffs being the ordinary iron ones used for prisoners, the others being leather. Restraint, I should say in passing, was not confined to the so-called refractory wards; for instance, in a lower and quieter ward, a man was tightly secured by a strait-waistcoat. Dr. Howard had him released, and he did not evince any indications of violence. It was said he would tear his clothes—a serious matter in an asylum conducted on the contract system! The walls and floor of the corridor in the roof were absolutely bare. But if the condition of the corridor and the patients presented a melancholy sight, what can be said of the adjoining cells in which they sleep and are secluded by day? They are situated between the corridor and a narrow passage lighted by windows in the roof. Over each door is an opening the same length as the top of the door, and 3 to 4 inches in height, which can be closed or not as the attendant wishes. This aperture is, when open, *the only means* of lighting the cell. The door is secured by a bolt above and below, and by a padlock in the middle. In the door itself is a *guichet* or wicket, secured, when closed, by a button. When opened, a patient is just able to protrude the head. There is, as I have intimated, no window in the room, so that when the aperture over the door is closed, it is absolutely dark. For ventilation, there is an opening in the wall opposite the door, which communicates above with the cupola; but whatever the communication may be with the outer air, the ventilation must be very imperfect. Indeed, I understood that the ventilation only comes into operation when the heating apparatus is in action. What the condition of these cells must be in hot weather, and after being occupied all night, and, in some instances, day and night, may be easily conceived. When the bolts of the door of the first cell which I saw opened were drawn back and the padlock removed, a man was seen crouching on a straw mattress rolled up in the corner of the room, a loose cloth at his feet, and he stark naked, rigorously restrained by handcuffs and belt. On being spoken to he rose up, dazzled with the light, and looked pale and thin. The reason assigned for his seclusion and his manacles was the usual one, namely, "he would tear his clothes if free." The door being closed upon this unfortunate man, we heard sounds proceeding from neighbouring cells, and saw some of their occupants. One, who was deaf and dumb, as well as insane, and who is designated *l'homme inconnu*, was similarly manacled. In his cell there was not anything whatever for him to lie or sit upon but the bare floor. He was clothed. Some of the cells in this gallery were supplied with bedsteads, there being just room to stand between the wall and the bed. When there is no bedstead a loose palliasse is laid on the floor, which may be quite proper. In reply to my enquiry, the Mother Superior informed me that it was frequently necessary to strap the patients down in their beds at night.

Passing from this gallery, which I can only regard as a "chamber of horrors," we proceeded to the corresponding portion of the build-

ing on the female side. This was to me even more painful, for when, after seeing the women who were crowded together in the gallery, on benches, and in fixed chairs, many of whom were restrained by various mechanical appliances, we went into the narrow passage between the pens and the outer wall, the frantic yells of the patients and the banging against the doors, constituted a veritable pandemonium. The effect was heightened when the *guichets* in the doors were unbuttoned, and the heads of the inmates were protruded in a row, like so many beasts, as far as they could reach. Into this human menagerie, what ray of hope can ever enter? In one of the wards of the asylum I observed on the walls a card, on which were inscribed words to the effect that in Divine Providence alone were men to place their hopes. The words seemed to me like a cruel irony. I should, indeed, regard the Angel of Death as the most merciful visitant these wretched beings could possibly welcome. The bolts and padlocks were removed in a few instances, and some of the women were seen to be confined by leathern muffs, solitary confinement not being sufficient. One of the best arguments in favour of restraint by camisole or muff is that the patient can walk about and need not be shut up in a room, but we see here, as is so often seen, that unnecessary mechanical restraint does not prevent recourse being had to seclusion. A cell, darkness, partial or total, a stifling atmosphere, utter absence of any humanizing influence, absolute want of treatment, are but too often the attendants upon camisoles, instead of being dispensed with by their employment. When such a condition of things as that now described is witnessed, one cannot help appreciating, more than one has ever done before, the blessed reform in the treatment of the insane which was commenced in England and France in 1792, and the subsequent labours of Hill, Charlesworth and Conolly. But it is amazing to reflect that although the superiority of the humane mode of treating the insane, inaugurated nearly a century ago, has been again and again demonstrated, and has been widely adopted throughout the civilized world, a colony of England, so remarkable for its progress and intelligence as Canada, can present such a spectacle as that I have so inadequately described as existing, in the year of grace 1884, in the Montreal Asylum.

Before leaving the asylum, I visited the basement, and found some seventy men and as many women in dark, low rooms. Their condition was very similar to that already described as existing in the topmost ward. A good many were restrained in one way or another, for what reason it was difficult to understand. Many were weak-minded, as well as supposed to be excitable. The patients sat on benches by the wall, the rooms being bare and dismal. A large number of beds were crowded together in a part of the basement contiguous to the room in which the patients were congregated, while there were single cells or pens in which patients were secluded, to whom I spoke through the door. The herding together of these patients is pitiful

to behold, and the condition of this nether region in the night must be bad in the extreme. I need not describe the separate rooms, as they are similar to those in the roof. The amount of restraint and seclusion resorted to is, of course, large. Yet I was informed that it was very much less than formerly.

To the statement in regard to the crowding of the patients in this asylum, it will be objected that I have given a description of a state of things which will shortly disappear, as additional wards are being provided for their accommodation. While I am glad to hear that other rooms will be available before long, I am not by any means convinced that the lowest and topmost wards of this asylum will be disused for patients. There are now, the Mother Superior said, about 1,000 lunatics in the building, and when first informed that new wings were being prepared, I concluded that it was for the purpose of providing increased accommodation for the existing number of inmates only. That hope, however, was greatly lessened, if not wholly dispelled, when I learnt from this lady that when these new wards are ready there will be room in the institution for 1,400 patients. It is said the new rooms will contain 600 beds, but how many cubic feet are allowed in this calculation I do not know. I have no hesitation in saying that when the patients are removed who now occupy the two portions of the building I have described, and when the occupants of the other galleries are reduced to the number the latter ought properly to accommodate, there would be at least 400 patients who should be removed from the old to the new building. If I am correct in this opinion, the present lamentable evils will continue after the opening of the additional apartments, or if they are mitigated for a time, they will but too surely be renewed as fresh admissions take place. Assuming, however, that overcrowding is lessened, and that these dark cells should cease to be used, what guarantee—what probability—is there, that the manacles will fall from the wrists of the patients of this asylum? I am not now speaking from the standpoint of absolute non-restraint in every conceivable instance of destructive mania. It is sufficient to hold that the necessity for mechanical restraint is exceptional, and that in proportion as an asylum is really well managed, the number whose movements are confined by muffs, strait-waistcoats and handcuffs will become fewer and fewer. The old system of treating the insane like felons has been so completely discarded by enlightened physicians devoted to the treatment of the insane, that it can no longer be regarded as permissible in a civilized country. The astonishment which I experienced in witnessing this relic of barbarism in the Province of Quebec is still further increased when I see such excellent institutions as the lunatic asylums of the adjoining Province of Ontario. I am perfectly certain that if it were possible to transfer the worst patients now in the asylum at Montreal to these institutions, they would be freed from their galling fetters and restraint-chairs. They

would quit their cells also, and, in many instances, be usefully occupied where they are now restrained, with the result that in not a few cases perfect recovery to health would follow. "Look on this picture and on this," were words constantly in my mind after visiting the institutions of the two Provinces. It can hardly be contended that a system which succeeds in one Province, and is attended by great success, ought not to be followed out in the other.

The question arises, why this difference in the condition of the insane in the asylums of the two Provinces? Whatever other reasons there may be for this extraordinary contrast, I have no doubt that the main cause is to be found in the different systems upon which the financial management of these institutions is based. It is a radical defect—a fundamental mistake—for the Province to contract with private parties or Sisters of Charity for the maintenance of lunatics. This, it cannot be too often repeated, is the essential root of the evil; and unless it be removed, the evil, although it may be mitigated, will remain and will bear bitter fruit. If any steps are to be taken to remove the present deplorable condition of the insane in the asylum of Montreal, it must be by the Province taking the actual responsibility of these institutions into their own hands. Whatever may be the provision made by private enterprise for patients whose friends can afford to pay handsomely for them, those who are poor ought to have the buildings as well as the maintenance provided for them by the Legislature. They are its wards, and the buildings in which they are placed should belong, not to private persons, but to the public authorities, with whom should rest the appointment of a resident medical officer.

The official inspection of this institution must now be referred to. When I was at the Quebec Asylum (Beauport) I obtained a copy of the report of that establishment. The names of three inspectors of the asylums and prisons of the Province are there given, namely, Drs. L. L. L. Desaulniers, A. de Martigny, and Mr. Walton Smith. They report to the Provincial Secretary, who resides at Quebec, and is the Government officer to whose department these institutions pertain. I was informed that the visits of the inspectors are due three times in the year. The Grand Jury are empowered, when they meet, to visit asylums and make a presentment to the Court in regard to their condition, but I understood that this is generally a very formal proceeding. With regard to the authority of the visiting physician appointed and paid by the Government, it has been hitherto, so far as I could ascertain, almost, if not entirely, *nil*. His hands have been so tied that he could not be held responsible for the way in which the asylum has been managed. The Quebec Legislature passed an Act in June last which has only just come into force, and which, among other provisions, extends and enforces the authority of this officer. It remains to be seen whether this Act invests him with sufficient power to carry out any system of treatment or classification of the patients which he may deem requisite.

There should, however, in any case, be a medical superintendent, with competent knowledge of the treatment, moral and medical, of the insane, with undivided authority and responsibility inside the institution, although subject to the Government, aided by efficient medical inspection.

Should the contract system be abolished, should capable medical men be placed at the head of the institutions of the Quebec Province, and should inspection made by efficient men be sufficiently frequent and searching, the asylums for the insane of this Province would become institutions of which Canadians may be justly proud, instead of institutions of which they are now, with good reason, heartily ashamed.

Beauport Asylum, Quebec.

I visited the Beauport Asylum, at Quebec, Aug. 18, 1884. It was established in 1845; additions were made to the original building in 1865 for the male patients, and in 1875 for the female patients. The medical superintendents reside in the city, several miles away, and I had not the pleasure of seeing them. There are two visiting physicians. The asylum is inspected by Dr. Desaulniers, Dr. A. de Martigny, and Mr. Walton Smith. Resident on the premises is the warden, and in the vicinity is an assistant physician. I have to express to both these gentlemen my obligations for the kind way in which they received me, the time they devoted to my visit, and their readiness to show me the various parts of the building. My thanks are especially due to Mr. A. Thomson, of Quebec, for the assistance he rendered and for accompanying me.

The asylum is a striking object to visitors to the Montmorency Falls as they pass along the road where it is situated. The approach is pleasant and the entrance attractive, being marked by the taste and cleanliness which characterise the dwellings of the Canadians generally. The warden received us politely, and took us round the building devoted to female patients. His wife occupies the post of matron, and has two assistants under her. The corridors into which we first went are sufficiently spacious, and serve the purpose of day-rooms to a large extent, the patients being seated or walking about. The patients here were well dressed, and appeared to be as comfortable as their condition would allow. The associated dormitories are large, cheerful rooms, well ventilated, and the beds neat and clean. I supposed that the linen had been clean that morning, but was informed that it was the last day in use, and was changed weekly. Strips of carpet and mats in the dormitories, as well as in the corridors, relieved the bareness of the floor.

The position and construction of a series of single bedrooms attached to the wards are most unfortunate. They are placed back to back, so that there is no window in them, the narrow passage which skirts them receiving light from a window at either end. There is an

aperture over the door, and a small one in the door itself. The ventilation is most imperfect, and it was not denied that in the morning their condition is the reverse of sweet. Some of these cells—for cells they must be called—were very close when I visited them. How such rooms came to be built for lunatic patients, for whom good air and sufficient light are so important, it is difficult to comprehend. I was informed that they were planned to expedite the escape of the inmates in case of fire, there having been a conflagration some years ago in which twenty-six patients perished, but I failed to see the fitness of such an arrangement. It appeared to me to be due to the desire to economise room, and I am not surprised to find, from one of the annual reports given me, that credit is claimed on the ground that the cost for care and maintenance is less than at ten asylums with which the Beauport Asylum is compared.

I have spoken favourably of the associated dormitories opening into the corridors. Those, however, in the attic were very gloomy and crowded with beds. I have also referred favourably to the dress of certain patients. I must add that in some parts of the house they were barely clad, and presented a very neglected appearance altogether.

The number of women in restraint was very considerable. Some wore the manchon or muff, others the close glove (*mitaine*); others were restrained by leather wristbands (*poignet*) fastened to a belt, while some were secured by the *gilet de force*, so that movements of the arms were effectually prevented. Several were secured to the bench on which they were seated. In one small airing court upon which I looked down, not a few were restrained; the whole company appeared to be unattended, or if there were attendants, the latter did not consider it a part of their duty to keep their dress in decent order. In referring to mechanical restraint, I do not judge of the condition of the patient, from the total non-restraint point of view. The amount resorted to in this asylum would not be seriously justified by any physician of the insane with whom I am acquainted, whatever his views on non-restraint may be.

After leaving the building in which the women are located, we walked into the grounds over a stream to a steep, grassy, airing court, which was fortunately shaded from the blazing sun of that day. Here a number of female patients were congregated, with one or two attendants. A wooden fence separates this ground from a corresponding grass plot for the men. From a window in the building for the latter sex I looked down subsequently, and the sight of the female patients lying or sitting on the grass in unseemly attitudes, and with scant and neglected attire, did not commend itself as one altogether desirable. The number of attendants is quite insufficient, and I cannot say I was favourably impressed with their appearance. Where so much importance is attached to economy, this cannot excite surprise. Their pay is very insufficient, as well as their number.

Passing to the building for the male patients, over which the resident physician escorted us and manifested the greatest willingness to show every corridor and room, I would observe that there are certain wards which, like those for the corresponding class of women, are both clean and respectably furnished; but when I have done justice to the accommodation afforded in these galleries, I have said all that I can say in the way of commendation. The higher one ascended in the building, the lower the condition of the patient—the corridors were much crowded, and the amount of mechanical restraint excessive. In the worst ward, the sight was in the last degree painful to witness. Here were some thirty patients. Some had leathern muffs, others the belt and poignet, while several were in cells as dark as those on the women's side, and were also restrained. One had his legs fettered at the ankles. There were also several men in restraint-chairs, to which they were fastened, and not only so, but they wore muffs. They were in their shirts, and over their exposed persons flies were crawling in abundance—a spectacle which it must suffice to describe without characterizing further. Among patients of the class now referred to, I counted fourteen restrained, but I do not pretend to have noted them all. For a man who was given to scratching his face, it was considered necessary not only to secure his hands by the muff, but to place him in a crib-bed.

But it is needless to describe in more detail an institution which, however willingly I may praise where praise is due, is so radically defective in structure and so fundamentally different from any well-conducted institution of the present day, in the matter of moral, to say nothing of medical, treatment, that no tinkering of the present system will ever meet the requirements of humanity and science. I regret to write thus. It is a thankless task for a visitor, courteously treated as I was, to criticise any institution which the officers permit him to inspect. But I write in the hope of helping, in however humble a way, to bring about a reform in the injurious practice of the State contracting with private individuals for the maintenance of its insane poor. The proprietors receive 11 dollars (45s. 10d.) per head per month for maintenance and clothing. This system involves the probability of patients being sacrificed to the interests of the proprietors. It has the diastrous tendency to keep the dietary as low as possible, to lead to a deficiency in the supply of clothing, and to a minimum of attendants, thus inducing a want of proper attention to the patients and an excessive resort to mechanical restraint, instead of that individual personal care which is no needful for their happiness and the promotion of their recovery. I consider that the number of attendants in such an asylum should not be less than 1 in 8,* instead of 1 in 15; and that a higher class should be obtained by giving higher wages. At present they are as follows: 9 to 10 dollars a month in winter for

* So in original MS., but in the "Canada Medical and Surgical Journal" the number 7 appears, owing to the writer's hasty correction of proof in travelling.

male attendants; 12 to 14 in summer. Women attendants have 5 to 6 dollars a month, or £12 to £15 a year. With a higher class, it might no longer be an irony to speak, as the chaplain does in one of the Reports, of "the good and virtuous keepers who are selected with great discernment."

I venture also to express the hope, in conclusion, that the Province of Quebec will itself undertake the responsibility of providing the necessary accommodation for its insane poor and their skilful treatment, that a resident medical superintendent, with full authority, will be appointed, and that there will be a Board of Management, as well as really efficient inspectors.

Since this article was written, the following has appeared in the "Canada Medical and Surgical Journal," November, 1884:—

"At a largely attended meeting of the Medico-Chirurgical Society of Montreal, held on Nov. 7, the following resolutions were unanimously passed:—

"1. That this Society has every reason to believe that the statements contained in the Report of Dr. D. Hack Tuke, of London, England, upon our Provincial Lunatic Asylums, are, in every material respect, true and well-founded.

"2. That these statements show a most lamentable state of things as regards the general, and especially the medical, management of these Institutions.

"3. That it appears to this Society to be the imperative duty of the Provincial Government to institute a thorough investigation by competent persons into the entire system of management of the insane poor in this Province.

"4. That the 'farming' or 'contract' system, either by private individuals or by private corporations, has been everywhere practically abandoned, as being prejudicial to the best interests of the insane, and producing the minimum of cures.

"5. That in the opinion of this Society all establishments for the treatment of the insane should be owned, directed, controlled and supervised by the Government itself, without the intervention of any intermediate party.

"6. That the degree of restraint known to be employed in our provincial asylums is, according to the views of the best modern authorities, excessive. That the ablest European, American, and also Canadian alienists have almost entirely given up any method of mechanical restraint. That these facts call urgently, in the name of humanity, for reform in this direction in our provincial asylums.

"That this Society concurs fully in the opinion already expressed by Dr. Tuke in his Report, to the effect that 'the authority of the Visiting Physician (Dr. Henry Howard), appointed and paid by the Government, has been hitherto almost, if not entirely, *nil.* His hands have been so tied that he could not be held responsible for the way in which the asylum has been managed.'"

PART IV.—NOTES AND NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The usual Quarterly Meeting of the Medico-Psychological Association was held at Bethlem Hospital on Wednesday, 5th November, 1884, at four o'clock, Dr. Rayner, President, in the chair.

The following gentlemen were elected members of the Association, viz. :—Benj. Hall, M.B.Lon., Earlswood Asylum; L. W. Bryant, M.B.Edin., Colney Hatch Asylum; D. G. Johnston, M.B., C.M., Glasgow, Moorcroft, Hillingdon; Edward Howard Paddison, M.D.Lond., Asst. Med. Off. County Asylum, Wandsworth; Edward E. Moore, M.B., Asst. Med. Off. District Asylum, Downpatrick; John Francis Woods, Med. Supt. Hoxton House Asylum, Hoxton; F. J. J. Barnes, M.R.C.P.Ed., F.R.C.S., Asst. Med. Off. Camberwell House, Camberwell.

Dr. W. Julius Mickle exhibited specimens of two hearts and a portion of brain, upon which he made the following remarks, viz. :—The pathological specimens shown are mainly from two necropsies made by me last week. One specimen is that of degeneration and moderate aneurysmal dilatations of the left ventricle of the heart, ending in spontaneous rupture of the wall of the heart. The patient, aged 50, had been for some years in the asylum, and recently had become nearly cured of former pulmonary phthisis. But he had also heart-disease, and this had not undergone cure. Between two and three weeks before death he was seized with some collapse, from which, however, he soon rallied. Subsequently it was noted that the præcordial area of dulness was increased, the apex beat of the heart being scarcely felt, and the cardiac sounds being feebly heard at the apex. A systolic bruit existed at the apex, and was slightly propagated towards the left. For a day or two vomiting occurred at times, and a burning pain was complained of in the præcordial region. The patient was kept quiet and in bed, and the above cardiac signs improved; but later on he died suddenly in the night, whilst lying quietly in bed. The heart was ruptured at the apex of the left ventricle, and 22 fluid ounces of blood and black clot were in the pericardial sac; the way out for the blood being (mainly at least) at the ruptured apex. There were some old pericarditic adhesions over the left side of the left ventricle, and on separating these the heart-wall was torn through, and from the adherent infiltrated clot it was evident that at least a partial præ-mortem tearing of the heart-wall had occurred here, and perhaps complete perforation at a small rent, permitting of a slight hæmorrhage at the time of the collapse, 17 days before death. Aneurysmal bulging of the wall existed here, as well as at the apex; and at these parts the ventricular parietes were thinned and degenerate; partly fibroid, partly fatty. There was also some general dilatation of the left ventricle. In connection with this, is also shown the heart of a former patient, the subject of cardiac bruit, and aged 44; who, while urinating, suddenly sank to the floor, breathed heavily, then vomited and defecated; and when seen by me, immediately afterwards, had turgid, livid face, laboured respiration, small, feeble, thrilling pulse, profuse perspiration, vomiting and unconsciousness. Then respiration ceased, was resumed, became stertorous, panting, and up-and-down in rhythm. Then were noticed :—Right hemiplegia, dilated almost immobile pupils, continued coma; cessation of respiration, return of it under artificial respiration and brandy-enema. Then, vomiting, paler lividity, and finally ceasing respiration. The necropsy showed slight meningeal hæmorrhage; and 5½ fl. ozs. of blood and clot were in the pericardial sac. From the upper and right part of the left ventricle passed a sinuous aneurysmal cavern, lined by a continuation of the endocardium, commencing by an aperture immediately

below the aortic semilunar valve, and passing rightwards behind and below the pulmonary valve, above and in front of the right auricle, thence curving round the right side of the heart, and terminating in a pouch, on the posterior aspect, and between the aortic arch and the right auricle, where was a ruptured slit in the aneurysmal wall and the way out for the blood. The left ventricle was hypertrophied, and had a second cardiac aneurysm behind and to the left of the mitral valve. The recognition of like cases is important, as the lives of the patients may be, possibly, saved or prolonged by securing the avoidance of any strain or excitement, and even if prevention is not feasible, one may be enabled to anticipate the rapid or sudden death, which in these cases immediately follows the actual rupture, when the latter is such as to permit of free hæmorrhage into the pericardial cavity. The remaining recent specimen is one of local acute red softening of grey cerebral cortex. The patient was in advanced pulmonary phthisis, with ulceration of the bowels. Only the symptoms connected with the lesion shown at the meeting are mentioned. Two days before death, sudden right brachial monoplegia came on, sensibility not being abolished. Next day there was also a slight paresis of the right lower limb, but the face was unaffected. The motor palsy of right upper limb was absolutely complete. On the day of death there were spasmodic twitchings of the right hand, and three dextral epileptiform seizures beginning there. On the last two or three days of life there were a few pneumonia patches; respiration also was irrégular, of up-and-down rhythm; the relation between the *a.m.* and *p.m.* temperature was reversed, the morning temperature being then the higher; whereas for some months previously (as shown in the charts exhibited) the evening temperature had usually been in excess, and often from 2° to 4° higher than that of the morning.—At the necropsy, among other conditions, the one of principal interest was a patch of acute red softening of the grey cerebral cortex of the upper one inch of the anterior central gyrus, and of the posterior half of those portions of the superior and middle frontal gyri, which are adjacent to each other, and markedly in the superior frontal sulcus itself. This lesion, in the fresh brain, had been very sharply and precisely defined; and as far as it went the case bore out conclusions that have been drawn, from a study and comparison of pathological cases, as to the cerebral cortical fields connected with various departments of the muscular system. For the upper part of the left anterior central gyrus is one of the parts of the cortex specially associated with the right upper limb; as is also the posterior part of the superior and middle frontal convolutions in some, but in far less, degree. Hence the palsy of right arm and convulsive phenomena. That the right leg almost escaped palsy was also of interest in relation to other pathological cases. Had a similar and symmetrical lesion occurred in the right hemisphere, it is probable that the left leg would have been more affected than was the right in this particular case, the left cerebral lesion of which is now shown. The case is mainly of interest from the association of a sharply defined lesion with very definite localized clinical symptoms; from the limitation of that lesion to the cerebral cortex; and from the bearings of the case, therefore, on the question of cortical function and theories of localization.

Dr. SAVAGE submitted a specimen. In the case of a man aged 78, suffering from senile melancholia, he had found on post-mortem examination very considerable disease of the aorta, and in the middle third of the first frontal convolution there was an ulcer three-quarters of an inch across, with a sloughy surface and adhesion of membranes to edges. There were one or two other appearances, but that which he specified was the most marked. Just before death there was a puffing of the side of the face, but in regard to the legs and arms there was nothing worthy of notice. The patient was insane only three weeks from the first. He had married late in life, and started with profound melancholia. It had afterwards been found that there had been a great deal of domestic trouble, and with his bad arteries he had been unable to stand domestic strain.

The PRESIDENT said that pathological specimens such as these were always of interest to the Association. In the asylum post-mortem room nothing was more striking than the extent to which heart-disease could go under the healthy conditions of asylum life. Was Dr. Mickle's case of brain-disease associated with syphilis?

Dr. MICKLE replied that the patient had suffered from primary syphilis—primary sores—but there was no proof of secondary syphilis.

Dr. SAVAGE asked Dr. Mickle whether the mental symptoms were in any way affected by the aneurism. In the only case which he had himself seen of an insane person suffering from well-marked aneurism, he had found that with thoracic pressure there was developed the idea of poisoning; and he had been interested in seeing that case, as he had so often seen cases of delusion of poison associated with lung disease.

Dr. MICKLE said that in the cases of aneurism of the heart the principal thing noticed was a tendency to a depression which he associated with the embarrassed condition of the heart. In that condition the heart not being up to its work, the brain was not sufficiently nourished by a good type of blood. In those cases, too, there were very well marked delusions of bodily injury, one thinking that darts of fire were coming down upon him, and the other being troubled by hydraulic pressure. In thoracic aneurism there was frequently most painful delusion. He had had several cases of cardiac aneurism quite as well marked, but he thought that the second case he had quoted was of extraordinary interest, on account of the curious course which the cavern had taken, and so forth.

Dr. W. H. O. SANKEY said that he had investigated the conditions, according to statistics, of diseases of the heart in connection with ordinary insanity, and Dr. Burman's paper had gone into the subject, but he could not find that there was anything like unanimity of ideas upon it, although he thought Dr. Burman had proved his case that in ordinary insanity there was a greater tendency to disease of the heart than in the population generally. As to aneurism suggesting the idea of suffocation, he did not remember a case, but he had a very curious one in which a woman was always saying she had gas inside her, and after death her gall bladder was found to be distended by gall stones.

The PRESIDENT said he remembered one case of extreme aortic regurgitation, in which there was a good deal of exaltation. The delusions subsided when the heart disease had improved.

Dr. SAVAGE said that they used to be told as students that "mitral meant melancholia." He had had cases in which large hearts had been associated with grand ideas. He had very rarely got anything like aneurism, but had had many dilated hearts. In his experience melancholia had more frequently occurred with mitral than with aortic disease.

Dr. B. B. FOX re-introduced the subject of "Exaltation in Chronic Alcoholism" (see Original Articles, page 233, of the July number). In recapitulating the points upon which he invited discussion, he said that he would remind the members that he did not propose to discuss alcoholic insanity as a whole, but merely one group of symptoms—exalted ideas—and the propositions which he ventured to bring forward were that these exalted ideas were very frequently associated with chronic alcoholism, but that they had much in common with the exaltation of other forms of insanity, more particularly of general paralysis, and that the bodily symptoms which occurred at the same time with them were so extremely similar that it was almost impossible to differentiate the two classes of cases, and in some instances this could only be done by watching the course of the malady. He had also ventured to lay before the Association the theory that these delusions of exaltation, which were usually fixed, constant, and ineradicable, were due to repeated hyperæmia, and therefore owing to organic or structural change, and that little or nothing could be done for their removal. He might say that in looking through the cases of alcoholic insanity in the asylum he had been struck with the large number of

cases suffering from delusions of persecution and suspicion, which seemed to prove that such ideas were nearly always associated with some physical change in the organism. Then, since he read his paper, he had seen one by a New York physician, in which it was stated that strychnia had been found to be almost a specific in these cases, given with quinine and a little gentian. That was, no doubt, a very excellent prescription in cases of chronic dyspepsia, &c., but he had yet to learn whether strychnia had the effect of being an antidote for alcohol.

The PRESIDENT said that he quite agreed with Dr. Fox's suggestion as to sensory hallucinations being associated with vitiated blood in the system. For a long time he had regarded the existence of a very active sensory hallucination as a proof of there being some disease inducing a vitiated condition of the blood either by kidney disease or some other cause, and he thought that if they were to examine all their patients who had very active sensory hallucinations—for instance, of burning of skin and of the application of heat and cold —this would prove to be the case.

Dr. SANKEY asked how they were to distinguish vitiated conditions of the blood. There had recently been an interesting paper on that subject by Dr. Macphail; but he should like to see the same enquiry carried on in regard to patients not in public asylums, where, of course, patients were sometimes not too well fed; and it would be very interesting to see whether this deficiency of the essential elements of the blood were due only to a bad diet or to a morbid state of the blood connected with insanity.

The PRESIDENT remarked that the only case which he could quote upon this point was one of general paralysis, in which a chemical examination had been made for him by Dr. Wynter Blyth, who had described the subject of his examination as "a sort of porridge of blood"—it contained such an excess of all kinds of materials.

Dr. SANKEY said that Dr. Marcet had had an analysis made, but the chemistry of that day was not sufficiently advanced. Probably a microscopical examination would be more likely to give results than a chemical one.

Dr. SAVAGE said that the question of localization and its effects in producing symptoms had always seemed to him, next to general paralysis, the most interesting of subjects; and just as general paralysis proved that almost any variety of disease might be accounted for by loss of higher control, so with alcoholism. They might call to mind the saying of Dr. Wilks, of Guy's, who referred to certain festive dinners and said, "If you watch the men who get drunk from them, you will be able to judge what the symptoms of general paralysis are." He looked upon exaltation of ideas as loss of the highest control and nothing more. Exaltation of ideas, with chronic alcoholism, was very hard to cure, and two years ago he might have said it was incurable; but he had lately found that very active treatment had been attended with benefit. He had only just discharged an Irish doctor who had had delirium tremens, and had suffered from the wildest exaltation. He was going to do wonderful things, cure everybody, take titles, &c.—the ordinary type—boastful and benevolent —a fine-grown fellow, and with every characteristic of general paralysis. That gentleman was sent into Bethlem with a very black mark by the persons who examined him. They both said, "Probably G. P." For months he (Dr. Savage) was in doubt. He blistered his scalp, and did so again and again, keeping the blister open, with the most satisfactory results. He was consequently now more hopeful than he used to be as regards curability. He believed that in most cases persons who had delusions of poisoning and were thoroughly filled by hallucinations of their senses were sufferers from bodily disease, but he did not accept that as a general principle. He had another case of a member of their profession at Bethlem, who was persecuted in the most terrible way by hallucinations of the senses. He had all kinds of tricks played upon him, people interfering with him and injuring him, &c. He was perfectly healthy, but there, perhaps, it was worth saying that it was almost beyond doubt that, having been sleepless, he had used morphia.

Dr. Thomson mentioned a case of innominate aneurism in a case of imbecility where no delusions were present, either of exaltation or depression.

Mr. Hayes Newington said that he should be glad if Dr. Fox would inform them from what point of view or upon what basis he had decided upon the cases.

Dr. Baker referred to a case of a patient with very exalted ideas who had been sent to him as a general paralytic, and concerning whom he was at first in doubt, but he used the Turkish bath and the patient rapidly recovered. He had since had a similar case. Both cases recovered in three or four months. Great care should be exercised in giving opinions in these very doubtful cases, some of which very rapidly recovered as soon as the alcohol was eliminated from the system.

Dr. Grieve said that at his asylum at Berbice, British Guiana, about fifty per cent. of the patients were East Indians, who consumed a large quantity of opium and were addicted to the use of cannabis indica. As a rule he saw no cases of general paralysis, and it might be taken as an accepted fact that among the dark races, general paralysis was unknown; but latterly he had watched five or six cases of chronic alcoholism which had exhibited exaltation, followed by physical symptoms resembling general paralysis, and which, after death, had shown undoubted meningeal cerebritis, and he should much have liked to have obtained the opinion of the Association as to whether these cases could be accepted as cases of general paralysis or merely of chronic alcoholism. With regard to the mental symptoms produced by opium, he could only say that after many years' experience he had never been able to connect any case of insanity with the use of opium, but insanity was very often connected with cannabis indica.

Mr. C. M. Tuke said he should like to hear more about Dr. Savage's case of the doctor who was cured by having the blister kept open. No doubt Dr. Savage had some hope from the absence of some symptom which led him to try that means. As regards the association of delusions of poisoning and so forth with physical disease, he might say that he knew of four cases, all of which showed very active delusions of poisoning and burnings, and all sorts of cruelties, and in all those four cases there was physical disease—one had phthisis, two heart disease, and one diabetes.

Dr. Savage said that the reasons which made him think that the case was not one of general paralysis were, first, the very definite history of drink to begin with, and acute onset, also the facts that he had been pursuing his business up to such a point, and that he was under thirty, and single, and an Irishman, with a neurotic temperament. Whenever he again got such a case in which alcohol played a part, he should certainly not hesitate to blister, and, if necessary, to blister freely.

Dr. Clapham said that gentian had been found of service in these cases.

Dr. Fox, in reply, said that he did not wish to state broadly that persons who suffered from these exalted ideas in chronic alcoholism never recovered; but that they very rarely recovered, and usually did not do so. He suggested that a great deal depended upon the length of time that the exalted delusions had appeared and lasted. One of the cases he had referred to had recovered, and in that case the patient had only been ill a month. His opinion was supported by Griesinger, who said that when those conditions had lasted six months, there was very little hope of the patient's actual recovery. As to what Mr. Hayes Newington had asked, he might say that he took a great deal of trouble. He scarcely attached any weight to the ordinary statement; but pursued the course which he had been taught at Bethlem. He saw the patient's friends and submitted to them a list of questions, and although he had been told that he would have great difficulty in getting those questions answered, he had never yet experienced a single refusal, and had got, as he believed, candid and truthful answers. It was upon those answers that he had based the remarks he made in his paper. He had found it very difficult to distinguish between chronic alcoholism and general paralysis.

In reply to further inquiry by Dr. Fox, Dr. GRIEVE said that he believed that cannabis indica produced quite as much chronic insanity as alcohol, but of a very different type. In the former there was a marked absence of all motor symptoms—no tremor. Probably the secondary effects of the two poisons bore the same relations to each other as the primary effects; and as cannabis indica was, as it were, less degrading than alcohol, so the chronic insanity arising from Indian hemp was limited much more to the higher centres than chronic alcoholism.

Dr. SAVAGE then read a Paper "On Cases of Delirium Tremens passing into Mania" (see Original Articles), and discussion was resumed on the two papers together.

The PRESIDENT said that they would probably agree with Dr. Savage, that delirium tremens and all forms of mental disturbance arose in acute febrile attacks, and were more common in the neurotic than in the non-neurotic classes. The brain fever which they heard of was very frequently delirium dependent upon the febrile condition.

Mr. HAYES NEWINGTON said that Dr. Fox had rather misconceived the object of his question to him, which was to ascertain if he had been able to get at any history, not of the amount of drink, but of the nature of the drink. Much depended upon the material which had upset the patient. He had seen a great deal of insanity arising from strong liquor, both in England and Scotland, and he could not help being struck by the great difference between the two in that respect; and in analysing a great number of cases it should be considered whether the patient, like the London cabman, had being going into the gin palace and having his three-pennyworth of gin without anything, or whether he drank as a well-ordered Scotchman, taking a quantity of whiskey with a large quantity of hot water and drinking it in the evening. Naturally, if a man drank enough alcohol to poison him right off, his mental symptoms would differ from the symptoms arising from the long-continued ingestion of poison in the shape of beer. So also with regard to chloroform and opiates. As bearing upon Dr. Savage's paper, he quoted a case in which a tendency either towards drink or opium could be traced through an entire family.

Dr. FOX said that in the majority of his cases the individuals had a very miscellaneous taste, but preferred to have their poison in the most concentrated form possible, and as a rule drank spirits. There was one who had very exalted notions, and who stuck to wine. His physical appearance bore out the idea, for he was fat, and round, and jolly. He came in craving for sherry, and kept up his craving for it all his life. He (Dr. Fox) was sorry that he could not state distinctly the definite relation between the form of the alcohol consumed and the form of the insanity, but, as a general statement, he might say that most of the cases to which he alluded in his paper were spirit drinkers to some degree. With respect to Dr. Savage's paper, it was to be remembered that they saw so many more neurotic cases than other cases, and it was consequently difficult for them to answer the question involved in it. For his own part, he thought that drink bred truly, and he could quote some cases to prove this, but his knowledge of the progeny of drunkards was too limited for him to answer Dr. Savage's question. Certainly, as far as his own experience went, it would be that a neurosis of drink was more frequently transmitted to successive generations in the same form.

Mr. C. M. TUKE mentioned the case of a lady who was taken with very acute mania after an operation on the breast, treated antiseptically. There was always great difficulty in keeping the wound properly bandaged. It was dressed as usual, and the operation evidently terminated favourably. The lady has been perfectly impervious to narcotics, many having been tried, and it was almost impossible for her to get any sleep, but when the wound was dressed she was placed under chloroform, and almost invariably slept four or five hours, or even longer. He had never heard of any case of acute mania in which chloroform had been given to procure sleep, but in this case it certainly did procure sleep, and very materially benefited the patient.

Dr. SANKEY said that the chronic results of alcoholism might take pretty nearly any form; they might come out in intellectual disturbance, or they might go into motor disturbances and resemble some of the spinal affections described in the Pathological Society's papers. Although he had never yet seen a case in which there was exaltation resembling that which occurred in general paralysis, he had seen various other disturbances, particularly with delusions and symptoms of poisoning and bodily harm, and that not only after drink, but in the delirium after fever. During the time he was at the Fever Hospital he had altogether under his care some 8,000 cases of fever of various kinds, and out of that number there were eight or ten cases of delirium remaining after fever, and of those two were permanently insane. As regards alcohol, however, it was generally supposed that when it became—as to its chronic effects—a foreign body in the blood, it might, according to the area it affected, produce certain symptoms. Many of those cases, formerly called mania a potu, certainly closely resembled general paralysis, but to the practised eye the appearances were different. He certainly did not think that alcoholism was incurable. He had had a gentleman who drank so hard that his hand got to shake so that he could no longer carry the glass to his mouth, and his memory was so bad that he could not tell when he had drunk last. His modicum was one bottle of brandy per diem. When he came under treatment that was gradually reduced, and in about three months he got perfectly well. He lived long afterwards, and became chairman of one of the largest public concerns. In these cases there is generally a little imbecility left, but this gentleman got quite well. He had been drinking for many years, and had become quite a chronic case.

Dr. SAVAGE said he quite agreed with Mr. Hayes Newington, that it was of the greatest importance to know what kind of drink had upset the man. As far as he could see, he was inclined to think that a very strong stimulus, such as gin or whiskey, was much more likely to permanently upset than a weaker kind. He was afraid he did not make his remarks as to inheritance sufficiently clear. He rather wanted to trace the effect of the alcohol in cases which were descended, not from alcoholic parents, but from neurotic parents. He quite accepted Dr. Fox's remark upon this point. Seeing neurosis on all sides they were inclined to forget that there were non-neurotics outside. As to chloroform, they had seen several cases in which insanity had followed operations. He saw a case of ovariotomy at St. George's Hospital. Within twenty-four hours after a successful operation, acute mania set in, and the patient died. The brain showed nothing special, but the acute mania in a person who had suffered from so severe a shock was enough to kill her. In some cases of small operations the chloroform might have set up the disturbance, though, of course, it might be said that the simple shock might have done it, or that even the idea of being in a hospital might have had something to do with it. But as regards the use of chloroform, he could quote a case of a young Greek girl upon whom, having tried everything else unsuccessfully, they tried chloroform as long as they dared, and he was then astonished to see her first return of consciousness exhibited by her putting her fingers to her nose. He was very much interested in Dr. Sankey's experience as to febrile cases. Of course, they only got cases which were insane—some with the history of fever. He had had a case (the third in a family) where a girl had had scarlet fever. The delirium passed off, and the most marked eroticism exhibited itself; and then the patient passed into a condition of profound depression, from which she had only recently recovered. The cases he had referred to in his paper, were distinctly cases of delirium tremens, following upon a somewhat prolonged course of drunkenness.

A Quarterly Meeting of the Medico-Psychological Association was held in the rooms of the Literary and Antiquarian Society, Perth, on Friday, 21st November. Present: Drs. Campbell (Murthly), Clark (Bothwell), Clouston (Edin-

burgh), Howden (Montrose), Macphail (Garlands), Rorie (Dundee), Rutherford (Dumfries), Turnbull (Cupar), Urquhart (Perth), Yellowlees (Glasgow). Dr. Urquhart in the chair.

William R. Watson, L.R.C.P., and S.Edin., Medical Superintendent, Govan Parochial Asylum, was elected a member of the Association.

Dr. HOWDEN (Montrose) showed a fire escape which was exhibited in the Health Exhibition by H. T. Bailey, Blackheath, and which seemed well adapted for use in asylums and hospitals. It consists of a long canvas tube or shute, two feet in diameter, suspended from an iron cage framework, which is fixed and folds up under an ordinary dressing table at the window. When the lower sash of the window is opened, the shute can at once be thrown out, and persons can descend with great rapidity and safety.

Case of Compensatory Hypertrophy of the Calvarium, covering an Atrophied Hemisphere of the Brain.—Dr. Clouston showed the brain and calvarium of a case of "Infantile Paralysis," who since birth had had the left side paralysed, and in whom the limbs on that side remained stunted and contracted. The patient had also been idiotic and epileptic. He had died of catarrhal pneumonia at the age of twenty. The skull was asymmetrical, and the right sides of the frontal, sphenoid, parietal, and occipital bones had been found to be greatly thickened in comparison with the left halves of these bones, while the whole of the bones of the skull were more or less hypertrophied. The frontal sinuses of both sides were enormously enlarged, running backwards over the whole of the orbital plate on the right side. The os frontis was $\frac{9}{16}$ inch thick on the right side, this being $\frac{1}{8}$ inch thicker than on the left. The sphenoid was much thickened on its cranial surface, presenting a rough, irregular surface, as if large nodules of solid osseous substance had been deposited on its surface. The crista galli was large, irregular, thick and solid, and the right middle fossa was considerably smaller than the left, being filled up, as it were, by a thickened inner table of the skull. The brain generally was much atrophied, and the convolutions poorly developed, but the right hemisphere of the cerebrum much more markedly so than the left. The former weighed 10 ozs., the latter 17 ozs. The atrophy, while general in the whole of the right hemisphere, assumed a markedly localised form in the frontal region. The ascending parietal, ascending frontal, and posterior portions of the middle and inferior frontal convolutions had almost disappeared, only little fibrous tissue being left over these wasted convolutions; there was a greatly hypertrophied pia-mater and arachnoid. The membranes generally were thickened, and there was, of course, much cerebro-spinal fluid. The ventricular surface of the right corpus striatum was ridgy from atrophic depressions. Altogether the pathological appearances of the surface of the brain resembled some cases of syphilitic arteritis of slow progression.

Dr. HOWDEN referred to a case of atrophy of the right hemisphere of the cerebrum and left side of the cerebellum, with atrophy of left side of the body, which he published in the "Journal of Anatomy and Physiology" for May, 1875. The case was that of a woman who died at the age of 34. She was epileptic, weak-minded, and irritable; there was muscular atrophy and contraction of the left side of the body. Occasionally after the fits she became excited, but at other times showed no symptoms of insanity. The right cerebral hemisphere and the right half of the pons were atrophied, as also the anterior pyramid and restiform body of the medulla, while the left cerebellar lobe, the sub-peduncular lobe, and the amygdala were atrophied on the left side. There were two remarkable pear-shaped bodies, each 15 mm. in their greatest diameter, depending from the anterior and inferior surface of the corpus callosum. The right lateral ventricle was greatly distended with fluid, and a gritty deposit, the size of a pea, was found in the substance of the corpus callosum. The brain measurements were as follow :—

CERBERUM.	Right	Left.
Length of hemisphere	144 mm.	166 mm.
Ditto of ant. lobe to fiss. of sylvius	35 „	$53\frac{1}{2}$ „
Ditto of post. lobe to ant. extremity of middle lobe ...	112 „	125 „

CEREBELLUM.	Right.	Left.
Transverse diam. from margin of medulla to outer edge of hemisphere	45 mm.	37½ mm.
MEDULLA.		
Breadth of anterior pyramid...	5 „	7 „

The brain is preserved in the Anatomical Museum of the Edinburgh University.

Dr. RUTHERFORD MACPHAIL read a paper on *A Case of Insanity Associated with Addison's Disease* (Original Articles, page 488).

The CHAIRMAN complimented Dr. Macphail on his very interesting paper, which illustrated the importance of bearing in mind that asylum-physicians should not lose sight of the importance of the careful study of general diseases.

Dr. CAMPBELL mentioned a case of Addison's Disease occurring sixteen years after what seemed to be hip-joint disease of two years' standing.

Dr. YELLOWLEES said that the last clause of Dr. Macphail's highly interesting paper was to his mind the most practical. The Addison's Disease may have been a mere coincidence. There is a tendency to associate coincident diseases as cause and effect, while it should be borne in mind that the insane are liable, like other people, to nearly all the diseases that afflict humanity.

Handbook for the Use of Attendants on the Insane.—The meeting then proceeded to revise the proof of the "Handbook for the Use of Attendants on the Insane," prepared by the sub-committee appointed at the Quarterly Meeting of the Association, held in Glasgow on 21st February last, which occupied the remaining time at the disposal of the members.

Special Subjects for Discussion.—Dr. HOWDEN suggested that when any subject is specially brought up for discussion stylographic copies of the paper introducing the subject should be circulated among the members with the notices calling the meeting.

BRITISH MEDICAL ASSOCIATION, BELFAST, 1884.

(DISCUSSION ON DR. D. H. TUKE'S PAPER.*)

Dr. NORMAN KERR said they must all welcome the extraordinary reduction in the amount of intoxicating liquor consumed in asylums throughout the kingdom. Dr. Lindsay, to whom Dr. Tuke had referred, had conducted a very satisfactory experiment in the Derby County Asylum, extending now over a year and a half, during which period no beer, no wine or spirits had been given to the staff or to patients, except as a medicinal remedy. Dr. Lindsay reported that neither he, nor the Committee of Management, nor the Visiting Justices, had anything to regret in the change, and they had no desire to return to the old régime. After deducting the liberal allowance to the attendants and officers, instead of beer, and the extras to patients, there had been a saving during the twelve months of £410. In the treatment of the sick, the cost for alcohol had greatly decreased, while there had been an increased expenditure on milk, beef-tea, and eggs. The average cost for alcohol had been reduced from 2d. per patient per week to ½d. The health neither of the well nor of the sick had suffered, the death-rate, in fact, having been slightly less than during the period of freer alcoholic consumption. In the West Riding Asylum, Dr. Major found no injurious result from the withdrawal of alcohol. The meat allowance had been increased, and there had been an extra supply of bread and cheese. Dr. Kerr thought the data at present available did not warrant any positive conclusion as to the lowering or raising of the mortality among the insane by the exclusion of intoxicating drink, though there was a reasonable presumption of the former; but there could be no doubt that no bad effects would ensue. This being so, it was very desirable to reduce to the lowest possible extent the

* See "On Alcohol in Asylums, chiefly as a Beverage." See Original Articles, p. 535.

amount of alcohol, for several reasons. Many patients were improved in health, while none suffered, and all became much more amenable to treatment. There was thus increased comfort and happiness to the patients, which greatly lightened the labour and anxieties of the attendants and officers; there was also improved discipline, and very much more reliable service. On the whole, it could be said with truth, that the marked diminution in the consumption of intoxicants in asylums had been attended by most satisfactory benefits, a diminution which Dr. Kerr trusted would go on till all such dangerous and disturbing agents were practically banished from establishments for the care and cure of the insane, except for strictly medical purposes.

Dr. YELLOWLEES (Glasgow) did not think beer at all necessary as a habitual article of diet for the insane, and had never given it, but insisted strongly on a very liberal dietary in all other respects. Private patients who have used stimulants all their lives, and deem it a comfort and a luxury, certainly ought not to be deprived of their wine simply because they have become insane. He did not deem it wise to give beer to the working patients only as a reward for work, for thus the weakly patients, who need beer far more and yet cannot earn it, are apt to be overlooked. Of course, as to the use and value of alcoholic stimulants as medicines there is no question.

Dr. BRUCE RONALDSON stated that he had withdrawn beer from all workers as well as others at the Haddington Asylum, the result being most satisfactory. Previously he had found a female patient in a state of intoxication, she having contrived to get the allowance of other patients. Another consideration was, that working patients who were thus supplied with beer during their asylum residence, were not nearly as hard-worked as when they were at their usual occupation, before admission and after discharge.

Dr. REES PHILIPPS (Virginia Water) said that he noticed that the Superintendent of one large County Asylum gave it, as his principal reason for discontinuing patients' beer rations, that the beer was always poured out before the patients sat down to dinner; and being drunk before the meat was served, this, in some cases directly injured the digestion. It would have been best, perhaps, to order the beer to be served in a civilized manner, namely, with the meat, before resorting to such a radical cure as cutting off the supply. But the discussion would be of value if it led Asylum Superintendents to give a little more attention to patients' food service. How seldom, even in asylums for the middle-classes, was the meat really well-cooked; how often was a delicate feeder disgusted by the sight of a plate loaded with food; how rarely was any serious attempt made to prevent patients from contracting vulgar table manners! And yet, by attention to these small matters, the patients' comfort and recovery-prospects were increased, while there was an actual saving in expenditure.

Dr. LYLE said that from the opening of Rubery Hill Asylum he had given no beer as an article of ordinary diet, and patients submitted to the new system without a grumble; at the same time, he increased the diet by giving an extra amount of butcher's meat, and a liberal supply of milk, tea or coffee; many of the patients had increased in weight, and were better physically. Where cases have a strong tendency to take too much stimulant, the only chance of a permanent cure is to cut off every kind of stimulant, so that the patient may lose any taste he had acquired for alcohol.

Dr. STEWART (Clifton) had had experience of the use of beer of very different alcoholic strength in two English County Asylums. One was the Dorset Asylum, from which Dr. Tuke received such a pathetic appeal in reply to his circular. In the other, the Barming Heath Asylum, the quality of beer was much stronger than could be borne with impunity by any neurotic case, but especially by such as could be traced to alcoholic excess. In the former of these two, the beer contained such a small percentage of alcohol that it could do no harm, even if it did no good. In a third asylum with which he was connected (Belfast), not only alcohol, but also tobacco was excluded from the dietary. In it the proportion of recoveries was rather above the average. The disappointment experienced by the patient at not getting his accustomed pipe

was made up for by many other indulgences. We must not allow our judgment as to treatment to be influenced too much by the feelings of a few patients. We have to ask ourselves the question, Will the cure of the disease be retarded by the patient ceasing to mix alcohol with his food? He believed the experience of the largest number of alienists would say that it would not.

Dr. RUTHERFORD said that, after lengthened and varied experience, he had come to the conclusion that the indiscriminate use of beer as an article of diet was unnecessary and injurious. Many years ago, when assistant physician at the Birmingham Asylum, a change was made in the distribution of beer; it was stopped to epileptics and to many chronic patients. He could not help thinking at the time that it was only a half measure, and that it would have been better to have stopped it altogether and improved the dietary. As Superintendent of the Argyll District and of the Barony Parochial Asylums, he did not use beer as ordinary diet, and within the last year, at the Dumfries Royal Institution, he had greatly modified the practice in regard to the distribution of stimulants by entirely abolishing wine and beer as an article of diet and making it extra or medical diet. At the same time, however, he improved the dietary by securing the services of a first-class hotel cook. The change had, he thought, had a beneficial effect on the patients, on the discipline of the staff, and on the whole tone of the establishment.

Dr. SAVAGE said he could not order persons to be abstinent and not abstain himself; he did not think pleasures ought to be removed from insane patients without replacing them; he did not mind if the patients were sleepy after dinner; he thought the danger greatest in the case of male attendants—the women having little tendency to drink. Men who have become charge-attendants run risk from opportunity and lack of active work. Alcohol, whether in the form of beer or wine, was good in some cases. He believed more, however, in good diet, and would be glad to sacrifice the beer for really good dinners. He believed also that the lads who came to their asylums would be much better without any beer.

INTERNATIONAL HEALTH EXHIBITION, Aug. 2, 1884.

Among the lectures delivered under the auspices of this Exhibition, was one of much interest by Dr. Shuttleworth, of the Royal Albert Asylum. A more appropriate opportunity could not have been chosen for introducing the very important subject of "The Health and Physical Development of Idiots as Compared with Mentally Sound Children of the Same Age." After describing certain well-known types of idiocy, he unhesitatingly asserts that the most frequent physical disorder amongst idiots is scrofula. Full 75 per cent. of the deaths in the Royal Albert Asylum have been due to scrofulous or tubercular diseases. As the object of the lectures at the Health Exhibition is to deduce lessons regarding the prevention of disease, Dr. Shuttleworth seized the occasion to insist upon the fact that scrofula is "essentially a disease of darkness and dirt," and that light and cleanliness, temperance, and avoiding imprudent marriages, are necessary conditions in the prevention of scrofula and idiocy. Referring to the large proportion of epileptics among idiots, there being at the Darenth Schools 153 out of 496 patients, and at Earlswood one-fourth of the inmates, Dr. Shuttleworth speaks of the inherited predisposition to nervous instability, for the origin of which we must look back to the circumstances of bygone generations. In England, unhappily, intemperance is too likely to figure in a certain number of cases as an ancestral cause.

That idiot children are more liable to sickness than ordinary children is amply proved; the exact ratio in this respect between the two classes is difficult to show by statistics, but the death-rate at institutions for idiots, compared with that of the general population at the same ages, guides us to their comparative vitality. Taking the figures in the reports of Earlswood and the Royal

Albert Asylum from 1879 to 1883, the following are the death-rates (calculated upon an average number under treatment at these ages) of 775:—

Ages.	Deaths per 1,000 resident at each age.		
	Male.	Female.	Total.
From 5 to 10	52·9	44·6	50·1
From 10 to 15	31·6	38·8	33·9
From 15 to 20	46·0	43·2	45·1

From the Registrar-General's Reports the following is deduced as the mortality in 1,000 persons living at certain ages from 1878 to 1882:—

Ages.	Males.	Females.
From 5 to 10	6·3	5·9
From 10 to 15	3·3	3·4
From 15 to 20	4·6	4·9

Contrasting these figures and those above given, we may say that the approximate ratio between idiot and ordinary mortality at the various ages is as follows:—

From 5 to 10, as 8 to 1;
From 10 to 15, as 10 to 1;
From 15 to 20, as 9 to 1;

the conclusion to be drawn from these limited data being that the death-rate of idiots between the ages of 5 and 20 is at least nine times as great as that of sound-minded children at the same period of life.

We have not space for two interesting tables showing the relative weight and stature of the general population and of idiots and imbeciles, but of course the comparison shows that the latter weigh less, and are shorter than the former. Adult idiots are 23 lbs. below the average in weight, and their stature is 3 inches below the average.

Dr. Shuttleworth concludes his paper with enforcing the moral that, in consequence of the tendency to disease and death among idiots, a medical man should be in charge of all institutions for their education and care. Further, that their surroundings should be salubrious and spacious, that the buildings themselves should be situated in accordance with hygienic principles, and that the dietary should be liberal, and contain the heat-forming constituents of food in abundance. Of course Dr. Shuttleworth does not omit the education of idiots on physiological principles, but this aspect of the question was specially treated of in a subsequent address.* The impression left on the auditors would no doubt be as encouraging as the state of the case allows, for it is probable that many would fail to catch the little but significant word, "perhaps," which precedes the closing sentence, in which an observer of the education of idiots is represented, in the words of Prospero, as seeing the cloud of idiocy lifting, and the rising senses chasing away "the fumes that mantle their clearer reason." This lecture will, we hope, be published in the "Transactions of the Health Exhibition."

* This, with a demonstration, was given in the Division of the Exhibition in connection with the exhibit, by the Royal Albert Asylum, of educational appliances and products, for which we are glad to see that Institution was awarded a Diploma of Honour.

THE ROYAL ALBERT AND EASTERN COUNTIES ASYLUMS.

As a fitting pendant to the foregoing, we would briefly refer to two institutions the Royal Albert Asylum, Lancaster, and the Eastern Counties Asylum. The annual meeting of the former was held in October last at Manchester, and reference was made to proposed changes in the Lunacy Laws,as bearing upon Institutions for Idiots. The Committee of the Asylum will press upon the attention of the Government the necessity for some alteration in the present law. It is held that, in the interest of the education of imbeciles, modifications are needed. As idiots, including imbeciles and feeble-minded, are comprised under "Lunatics" in the Act 8 & 9 Vic., c. 100, children cannot be received into idiot asylums without the certificates, &c., required for lunatics. It is no doubt true that this Act is a bar with many parents to sending their children to educational institutions. We wish every success to this attempt to alter the present Lunacy Act.

In reference to the Eastern Counties Asylum, Colchester, we regret that the long and valued services of the superintendent, Mr. Millard, have now been brought to a close in consequence of failing health. This gentleman's unwearied interest in the work, and the conscientious discharge of his duties for so many years, are well known to our readers, and his name will always be associated with the reforms in the condition of idiots and their education. We rejoice to know that Mr. Millard will, as a member of the Board and House Committee, be able to assist in the management of an institution, the future progress of which he has so much at heart. The Directors have appointed Mr. and Mrs. Williams, of Birmingham, to be Superintendent and Matron, while Dr. W. G. Coombs has been appointed Resident Medical Attendant. Dr. Coombs brings from Peckham House, where he was Assistant Medical Officer, the highest testimonials to his character and fitness for his new post.

RETIREMENT OF DR. MAJOR FROM THE WEST RIDING ASYLUM.

With profound regret the medical profession must witness from time to time the falling out from the ranks of those whose unselfish devotion to duty necessitates a rest from the heat and the toil of the day. The resignation by Dr. Herbert C. Major of the Directorship of the West Riding Asylum is another instance of what so frequently occurs when unswerving integrity conjoined to thorough conscientiousness leads to exertions which overleap themselves and compels the spirit to recognize the laws of flesh. Dr. Major had no light task to accomplish when he accepted the Directorship of an institution which had taken so prominent a position amongst British Asylums. How Dr. Major has fulfilled the task assigned to him, the warm and unanimous verdict of his fellow-workers will sufficiently attest.

Embued with that spirit which best characterises the progressive age in which we live, and which alone can save our asylums from degenerating into huge workhouses, Dr. Major has persistently endeavoured to organize a band of scientific workers, and has by his individual efforts in varied histological research advanced science *pari passu* with the fulfilment of the routine duties of administration, although unfortunately at the sacrifice of his health.

Dr. Major has contributed several memoirs of great value to Neurological Science. We sincerely hope that his retirement from office will leave him leisure for further work in this ever-widening field.

We are glad to see that so excellent a choice of a successor to Dr. Major has been made as that of Dr. Bevan Lewis. We sincerely hope that he may be able to pursue, in no inconsiderable degree, his excellent scientific work, do his duty to the patients, and retain his health and strength.

Obituary.

M. DUMESNIL.

We record with regret the death of Dr. Dumesnil, for many years one of the principal editors of the "Annales Medico-Psychologiques," and devoted chiefly to the department of the English literature of our subject.

Dr. Edouard J. B. Dumesnil was born at Constance on December 1, 1812, and was therefore just completing his 72nd year. After distinguishing himself at the Lycée of his native city, he proceeded to Paris for his medical studies. He passed with success the Concours for the position of "Internat des Hospitaux," and remained a long time as an interne attached to the service of Orfila, Lisfranc, Martin-Solon, &c., in which position he carried off several medals in various Concours, and particularly one from the Societé de Médicine of Bordeaux in 1839.

Having married, he gave up a career which seemed opening for him in Paris, and sought a position in the provinces. The question of the Treatment of the Insane in France was at this period just becoming mooted, and competent persons were required for the reorganization of the Asylums and other Establishments for the Insane. Dr. Dumesnil was selected as one eminently qualified to fulfil the duties of reorganization, and in 1847 he was appointed Medical Superintendent (Directeur Médicin en Chef) of the Asylum of St. Dizier (Haute Marne). Among those chosen on the same occasion were men whose names are very familiar to the whole of our specialty, Foville (père), Parchappe, Ferrus, Marcée, Morel, Renaudin, and others.

In 1852 he was removed to Dijon, in which appointment he had for assistant (interne) Dr. Legrand-du-Saulle, with whom he maintained a close intimacy and friendship ever after.

Lastly, in 1858 he was called upon to preside over the foundation of a new asylum for the very important Department of Seine Inférieure, at Quatres Mares, near Rouen, of which asylum he continued to be Medical Superintendent for the following 14 years. In this post he was, unlike many holding the office of physician to asylums in France, the administrator as well as Chief Medical Officer of the establishment. He conducted the duties of his office with great zeal and solicitude—taking equal interest in every department, being, in fact, at the same time its physician, financier, architect, and agriculturist, &c. Every detail, in fact, came immediately under his personal attention. The asylum at Quatres Mares, besides resembling our English County Asylums in being devoted to the poor, has besides a separate wing for private patients, and the management of this department added considerable complication to the general duties of the establishment.

Having acquired a well-merited reputation in these various duties, professional and social, he became entrusted with other official matters of civil character, which added considerably to his social position as well to his labours. He was elected President of the Academy of Rouen, and appointed a Chevalier de la Légion d'Honneur.

On his retirement from his office of Physician in Chief at Quatres Mares in 1872, he was made Inspecteur-Général of Asylums and Prisons. He continued to occupy this office during eight years, when he was compelled to resign, having attained, according to the rules of the French laws, the limit of age for public employment. On his resignation of his official connection, he took up his residence in Paris. He was promoted about this time to be Officier de la Légion d'Honneur. He was also elected President of the Société Médico-Psychologique, and he took much interest in every question connected with lunacy. He continued to be one of the principal collaborateurs of the "Annales Psychologiques;" the section of the review of the English journals and literature being his chosen department, and he was occupied in this duty the day previous to his

fatal attack. He had been ailing a few days only, when he was seized with the symptoms of embolism.

Dr. Dumesnil was well acquainted with English, and took much interest in English views on insanity. He visited the chief English Asylums in 1860, and thus became known to many members of the Association. He was extremely well read on all subjects. He was the author of several original articles. His inaugural thesis on affections of the bladder has been often referred to. He wrote also a memoir, entitled "Sur les Aliénés Alcooliques." He was one of the authors of the official report of 1877 upon the state of asylums in France.

He was always courteous, kind, hospitable, and a warm-hearted friend.

W. H. O. S.

Appointments.

Braine, G. M. P., M.R.C.S., L.R.C.P.Lond., appointed Second Assistant Medical Officer to the Worcester County and City Asylum.

Coombs, W. Godwin., M.D., appointed Resident Medical Superintendent of the Eastern Counties' Asylum for Idiots, Colchester.

Denning, C. Ernest, L.K.Q.C.P.I., L.R.C.S.I., appointed Senior Assistant Medical Officer to the Salop and Montgomery County Asylum, Shrewsbury.

Dodds, W. J., M.D., D.Sc., appointed Assistant Medical Superintendent of the Montrose Royal Asylum.

Douty, J. H., M.R.C.S., L.S.A.Lond., appointed Senior Assistant Medical Officer, and Deputy Superintendent of the Worcester County and City Asylum.

Dunn, Thos., M.B., appointed Assistant Medical Officer of the Woodilee Asylum, Lenzie.

Fielden, W. E., M.D.Lond., appointed Assistant Medical Officer of the Asylum for Idiots, Earlswood, Redhill.

Hale, Chas. J., L.R.C.P., M.R.C S.Lond., appointed Junior Assistant Medical Officer of the Salop and Montgomery County Asylum.

Hall, B., M.B.Lond., M.R.C.S., appointed Second Assistant Medical Officer of the Middlesex County Asylum, Banstead.

Jelly, F. Adolphus, M.B., C.M.Ed., appointed Assistant Medical Officer of the Wonford House Asylum, Exeter.

Lewis, W. Bevan, L.R.C.P., M.R.C.S., appointed Medical Superintendent of the West Riding Asylum, Wakefield, *vice* Dr. Major, resigned.

Martin, Jas. P., M.R.C.S., appointed Junior Assistant Medical Officer Wilts County Asylum, Devizes.

McWilliam, Alex., M.B., C.M.Aberd., appointed Senior Assistant Medical Officer Somerset and Bath Asylum, Wells.

Murchison, Fin. Fin., M.B., M.A., appointed Medical Superintendent of the Peckham House Asylum, Peckham, S.E.

Stewart, Rothsay C., M.R.C.S., L.S.A., appointed Assistant Medical Officer of the Peckham House Asylum, Peckham, S.E.

Suffern, A. C., M.D., M.Ch., appointed Assistant Medical Officer of the Borough Asylum, Winson Green, Birmingham.

Taylor, A. Everley, L.R.C.P. and S.Ed., appointed Second Assistant Medical Officer of the County Asylum, Stafford.

Tomkins, Harding H., M.R.C.S., appointed Assistant Medical Officer Gloucester County Asylum.

Tuke, J. Batty, appointed Deputy Medical Superintendent of the Saughton Hall Institution.

Williams, P. Watson, L.R.C.P., appointed Clinical Assistant in the Birmingham Borough Asylum.

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